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Faculty perceptions of a self-instructional teaching analysis program.

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FACULTY PERCEPTIONS OF A SELF-INSTRUCTIONAL TEACHING ANALYSIS PROGRAM

A Dissertation Presented

By

Jon Martin Anastasio

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ABSTRACT

Faculty Perceptions of a
Self-Instructional Teaching Analysis Program

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From 1971 to 1977, the Clinic to Improve University Teaching at the University of Massachusetts offered an individualized teaching improvement service (the Clinic Process) to University faculty seeking to improve their use of twenty specific teaching skills and behaviors. The researcher sought to introduce further flexibility and improved cost-effectiveness to that service through the development and implementation of a Self-Instructional Teaching Analysis Program (SITAP).

SITAP is a two-module system which guides faculty in the collection and analysis of data from four major sources: (1) students, (2) their self-perceptions, (3) a videotaped sample of teaching, and (4) an in-class observer. The activities and information contained in SITAP closely correspond to the data collection, data analysis and data review stages of the Clinic Process, and are based on that service. The three major purposes of SITAP are to allow faculty to work independently and at their own pace to determine their teaching strengths and areas needing improvement; to familiarize the SITAP user with op-

tions and techniques for teaching analysis, thereby building self-development skills; and to reduce the amount of time required of teaching improvement staff to administer the Clinic Process to faculty clients.

A sample of 14 instructors at the high school and college levels was recruited by the researcher to work through the SITAP materials during the Spring 1978 semester. Faculty perceptions of SITAP collected by the researcher included the usefulness of SITAP as one such approach, the major strengths and weaknesses of SITAP, and whether the time expended was justified by the benefits to the user. In addition, the researcher logged all interactions with the participants to determine whether the use of SITAP reduced the amount of time necessary to administer to faculty the data collection, analysis and review stages of the Clinic Process.

Results of the analysis of data suggest that faculty interested in determining their teaching strengths and weaknesses find the self-instructional approach useful. Some participants felt that the self-instructional approach to teaching analysis was more appropriate to their operational styles than would be a similar service performed by a consultant. The SITAP materials were considered appropriate and useful, but at times needlessly complex in task and materials design. Many participants were concerned that it required eight to 12 hours to complete the program, but felt that the time spent was justified by the outcomes. Some felt that institutional incentives should be offered for participation in such activities. A reduction in teaching improve-

ment staff time of up to 75% was realized for the data collection, analysis, and review stages of the Clinic Process through the use of SITAP.

The results of this study suggest that SITAP and similar materials would be well received and utilized by faculty who enjoy working at such tasks independently and who wish to determine an in-depth analysis of their teaching performance. The reduction in the time required of teaching improvement staff to administer the Clinic Process indicates that that service may be utilized by institutions or programs with limited resources for instructional improvement. The use of self-instructional materials for teaching analysis and the guided development, implementation, and evaluation of structured improvement activities should be encouraged.

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C H A P T E R I

INTRODUCTION AND BACKGROUND

The present decade has seen the steady emergence and growth of instructional improvement programs in higher education. Centra (1976) estimates that "perhaps half or slightly more than half of the post-secondary institutions in the United States currently provide some sort of program or set of development activities for faculty" (p. 6). In various forms, instructional improvement programs seek to help college and university faculty improve their instructional effectiveness. Improvement services vary among programs and institutions, based on such issues as the needs of the client group and the expertise of the program staff.

Gaff (1975) has identified three major categories of instructional improvement programs and services. These categories, instructional, organizational, and faculty development, represent diverse approaches to enhancing instructional effectiveness through foci on different aspects of the educational environment. The broad category of instructional improvement services as well as the more specific developmental approaches will be explored in detail in Chapter II. However, in order to provide a context for this study, the major characteristics of each approach are delineated here.

Instructional development programs and services are designed to improve the quality and effectiveness of courses, curricula and edu-

cational materials. This approach to instructional improvement, says Gaff (1975), "emphasizes the improvement of learning for students" (p. 47). Strategies for improvement can include the provision for and production of educational media, consultative assistance for faculty on course design and materials development, and assistance to departments in reviewing and restructuring the academic program.

Organizational development programs address issues involving the administrative environment in which faculty members must function. The overall operation of the department or school is examined in terms of the individuals' responsibilities, leadership and group-functioning styles, and professional roles. The use of organizational development techniques in higher education is based in part on the hypothesis that in order for an individual's professional growth and change to be encouraged and internalized, corresponding growth and change must occur in that individual's working environment. Gaff (1975) indicates that "organizational development may overcome some of the deficiencies in faculty and instructional development" (p. 76).

The objectives of a faculty development program reflect the developmental needs in the performance of the individual instructor in any and/or all of his or her professional roles. According to Melnik and Adams (1975), the services offered range "from curriculum design and course evaluation, through teaching skills, styles and methods, to individualized self-improvement or analysis" (p. 1). The activities undertaken by faculty development programs reflect the philosophy of and the perception of needs by the program staff, and are supported by educational and psychological research. Within faculty development, a

number of approaches are available to improve the quality of instruction through a focus on the activities of the individual faculty member. One such approach, that of examining the instructor's use of teaching skills, is known as the Clinic Teaching Improvement Process. It is this approach that forms the focus of the current study.

Teaching Improvement: The Clinic Process

At the University of Massachusetts at Amherst, a Teaching Improvement Process developed at the Clinic to Improve University Teaching (hereafter "Clinic Process" and "Clinic") has been in use since 1971 for instructional staff wishing to improve their teaching performance through a focus on twenty specific teaching skills and behaviors gleaned from educational research and the experience of the Clinic staff. The instructor is guided through the Process by a specialist (hereafter "Teaching Consultant") trained in the data collection and analysis procedures of the Clinic Process and the design and monitoring of improvement strategies. The presence of the Teaching Consultant is an element that instructional improvement program directors consider a useful component of a faculty development service (Centra, 1976, p. 21). The six major steps of the Clinic Process enable a faculty member to proceed from data collection through data analysis to arrive at a profile of teaching strengths and areas needing improvement and the implementation of specific improvement strategies. This is one of the more systematic services offered by faculty development programs for individual growth and development.

Erickson (1976) found that University of Massachusetts faculty

participating in the Clinic Process felt that "it improved their teaching . . . agreed that it was worth their time and effort . . . (and) that they would recommend it to their peers" (p. 9). Many colleges and universities have adopted the Clinic Process for use as an in-service development activity for faculty, including the University of Rhode Island, Indiana University and Murray State University. In addition, the Rutgers College Department of Psychology has found the Clinic Process applicable to the instructional training needs of graduate teaching assistants.

Stages of the Clinic Process.

Initial interview. The faculty member's involvement in the Process begins with an interview with a Teaching Consultant. During this meeting, the instructor expresses his or her general feelings about teaching, identifies initially what he or she considers to be his or her major instructional strengths and weaknesses, provides basic course information, and discusses with the Teaching Consultant those issues that seem to have major impact on his or her instructional situation. Also during this meeting, involvement in the Process is explained and negotiated, and data collection procedures are scheduled. Critical to the success of the Clinic Process is a trusting and open relationship between the Teaching Consultant and the faculty member. It is during the initial interview that this relationship is established.

Data collection. Three major activities are undertaken during this second stage of the Clinic Process: (1) the administration of a

student rating instrument (The Teaching Analysis by Students or TABS), (2) a videotaped sample of teaching performance, and (3) one or more classroom observations by the Teaching Consultant. The Teaching Consultant explains to the students the purpose of the activities at the time of the questionnaire administration and/or the videotape. The focus on improvement is stressed in order to help insure honest and open responses on the questionnaire. In addition, it is indicated that the instructor's participation in no way reflects that he or she is a poor teacher, rather that he or she is interested in improvement.

Data analysis and review. When all data have been collected, the student responses are computer scored together with a self-assessment and a prediction of student responses on TABS completed by the faculty member. The Teaching Consultant analyzes the data from all sources consulted, including the instructor's comments during the initial interview. The analyses are then compared and reviewed to compose a profile of the skills felt to be most critical to the instructor's teaching style and situation, and of those the skills that represent clear strengths and areas needing improvement. This profile is shared with the instructor at a data review meeting, during which improvement strategies are designed and planned and monitoring procedures determined. In most cases, the instructor views the videotape and examines the TABS data before this meeting.

Teaching improvement strategies. Following the data review meeting, the instructor implements the improvement plans with the assistance of the Teaching Consultant. This phase of the Process usually lasts from four to eight weeks. Strategies range from teaching

"tips" to elaborate skill training procedures such as microteaching, depending on the analysis of the data and the needs of the instructor.

Data re-collection. When all improvement plants have been implemented or the available time exhausted, the Teaching Consultant and instructor together design a second, shorter student rating instrument (Post-TABS) to determine student perceptions of change. In addition, a second videotape may be made of the class to provide examples of changed behavior, or illustrate the absence of changed behavior.

Final interview. During this last stage of the Clinic Process, the results of the second data collection are shared and future improvement work that may be indicated or desired is negotiated. At this point, the Process formally ends. Instructors may continue improvement work into another semester, work independently on their problem areas, or become involved in other teaching improvement activities, building on their experiences with the Clinic Process. There are a variety of developmental options open to participants in the Clinic Process.

The role of the Teaching Consultant. Centra's (1976) study of Faculty Development Practices in U.S. Colleges and Universities provided a forum for instructional improvement program directors to report on their assessment of the use and effectiveness of various faculty development services. Among the significant findings regarding the usefulness and effectiveness of services were that practices considered most effective involve "specialists to help faculty in instructional or course development" and "specialists to help faculty develop teaching skills" (p. 21).

During an instructor's participation in the Clinic Process, the central figure is the Teaching Consultant, a "teaching improvement specialist" whose role is new, if not unique, in higher education. At the Clinic, a Teaching Consultant is an advanced graduate student trained to collect and analyze data from multiple sources in order to develop a profile of an instructor's major teaching strengths and areas needing improvement. Most important, however, is the Teaching Consultant's ability to assess instructional problems, to help an instructor design individualized improvement strategies, and assist in their implementation and evaluation. The focus of improvement efforts is determined after a careful review of the data by the instructor and Teaching Consultant.

While the individuals who have worked as Teaching Consultants have come from many diverse academic backgrounds including English, French, Psychology, International Relations and Education, all have shared an interest in teaching and a concern for the quality of instruction in higher education. Training is provided to Teaching Consultants through study of Process protocols and guided implementation of the Process with a faculty client. Erickson and Sheehan (1976) note that "some may be surprised that graduate students can be a credible medium for providing faculty with what they obviously consider to be a very useful service" (p. 9). Indeed, many faculty doubt the Teaching Consultants' ability by reason of their inexperience. However, as Erickson found, faculty are satisfied with the service provided, and are generally impressed with the graduate students with whom they work.

There are a number of skills critical to one's ability to

function as an effective Teaching Consultant. The Teaching Consultant's ability to establish a trusting relationship with the faculty client is central to the success of the Process. The client must be comfortable with the Teaching Consultant as an individual, and confident in the Consultant's ability to provide the necessary degree of service. All information obtained by the Consultant regarding the instructor's teaching performance remains confidential, due to the voluntary nature of the Process. The faculty member must be confident in the Teaching Consultant's ability to maintain this confidentiality. The Clinic's Teaching Consultants are skilled in interviewing techniques, and in interpersonal skills that enable them to build such relationships with faculty members. The major talent required of the Teaching Consultant is his or her ability to effectively conceptualize and design improvement activities based on the data from multiple sources, and assist the instructor in their implementation.

Statement of the Problem

Constraints of the clinic process. Although interest and enthusiasm for faculty development activities are evident in many sectors of higher education, there are a number of constraints that affect the type and scope of improvement activities undertaken by such programs. In institutions of higher education across the country, the same reduction in resources that has reduced faculty mobility and created a restrictive employment field has curtailed the size of program staff and the number and kinds of services that may be offered (Group for Human Development, 1973; Gaff, 1975; Bergquist and Phillips, 1975).

These conditions have necessitated a reliance on existing faculty for institutional revitalization. It is generally the mandate of a faculty development program to assist faculty in their role in this revitalization. At large universities, the staff of a faculty development program often cannot hope to work with all individuals needing or seeking instructional assistance. Such assistance may be required in various forms, including analysis of a videotaped sample of teaching, redesign of an existing course, assistance in test construction, or assistance to an academic department in the restructuring of its academic program.

In addition to the Clinic Process, the services mentioned above have been provided by Teaching Consultants on the staff of the Clinic. Teaching Consultants have also been engaged in constant revision of Process materials and development of new techniques for implementing the Process. Since 1975, the Clinic and the Center for Instructional Resources and Improvement have designed and implemented instructional improvement services of greater scope than the individualized Clinic Process. These services include departmental improvement projects during which instruction, curricula, and academic organization are examined, follow-up services to past clients through workshops, and skill-oriented seminars and workshops for University Instructional staff. The demands on the Teaching Consultant have increased, revealing important constraints of the Clinic Process.

As the Teaching Consultant's role has been expanded through the provision of more and varied services, the need to maintain the individualized teaching improvement process has remained constant.

The Clinic Process requires approximately 20 hours of attention from the Teaching Consultant per client. Given the Teaching Consultant's other duties, the experience of the Clinic staff indicates that one Teaching Consultant can effectively bring six clients through the Process in one (14-week) semester. Provided with a staff of five Teaching Consultants (the Clinic staff at its largest), this rate of service would allow for 60 instructors to participate in the Process each year. In a large institution, where the instructional staff including faculty and graduate assistants can total more than 2000, this is clearly a costly and relatively limited level of service.

Of the 20 hours devoted to each instructor by the Teaching Consultant, only eight to 10 hours are concentrated on improvement activities. The remaining hours are devoted to data collection and analysis procedures and record keeping. This is not the best use of time for a specialist trained in improvement techniques. Although the diagnostic stages of the Clinic Process have been considered an awareness-producing improvement strategy by some, the focus of the Process is that stage at which improvement activities are designed and implemented based on the analysis of all data sources. To be made more cost-effective, modifications in this staff-intensive Process should be considered to concentrate the Teaching Consultant's activity in the improvement strategy functions. Centra's findings regarding the effectiveness of services involving trained specialists to help faculty develop teaching skills certainly supports the role of the Teaching Consultant and the function of the improvement strategy stage of the Process. The modification of the Process that is considered in the

present study is also based on Centra's (1976) findings; that a "system for faculty to assess their own strengths and areas needing improvement" is a service perceived as useful by faculty development program staff (p. 16).

Self-Instructional Teaching Analysis: The Present Study

The purpose of the present study is to determine whether faculty perceive as useful a self-assessment of their teaching strengths and areas needing improvement whith utilizes the data collection and analysis procedures of the Clinic Process organized in a self-paced auto-tutorial formal. Such a self-assessment would substantially reduce the time required of the Teaching Consultant to administer the Clinic Process. It is reasonable to assume that principles of auto-tutorial instruction currently finding application in undergraduate and graduate courses are applicable to materials used by college faculty to further their professional growth. As Gaff (1975) states, teaching improvement activities constitute the "in-service education" of college and university faculty (p. 187).

The Self-Instructional Teaching Analysis Program (hereafter "SITAP") was designed to serve a number of major purposes. First, by eliminating the Teaching Consultant's responsibility for data collection and analysis tasks, it should enable the staff of a program to work with more faculty per semester. Second, it allows faculty to work at their own pace on the diagnosis of teaching strengths and weaknesses, calling in the Teaching Consultant in the event of difficulty or when the final outcome has been achieved. This serves to emphasize that the

Teaching Consultant-client relationship is more for the purpose of effecting improvement of teaching performance than proceeding through a diagnostic procedure. Third, the use of SITAP should help to build self-development skills for faculty by acquainting them with data collection and analysis procedures that may be used to continually monitor their teaching performance.

The SITAP (see Appendix A) is designed to provide a comprehensive teaching analysis service to those faculty whose style is to work alone. As such, it is not expected to appeal to all instructors who might seek such a service. In addition, the program offers this service to those individuals who might be threatened by the presence of a Teaching Consultant, prefering not to share their teaching analysis with others.

Significance of the Study

The present study is of potential significance to both faculty and instructional improvement program staff. Results indicate the extent to which faculty perceive as useful the self-instructional approach to teaching analysis and the activities and information provided in the SITAP manual, and whether the time required of the Teaching Consultant during faculty participation in the SITAP procedure is reduced.

For faculty, the use of this approach provides a method whereby teaching performance can be monitored without the need for intervention by teaching improvement personnel. The resulting degree of independence may make the task of evaluation of teaching a more positive one that is looked to for constructive feedback regarding the improvement of one's teaching performance.

The sophistication gained by faculty in the use of data collection and analysis procedures is expected to reduce the anxiety surrounding the use of videotape and evaluation generally, emphasizing the value of these activities as bases for structured and comprehensive improvement work.

It is assumed in this study that faculty as learners demonstrate the same need for autonomy in the learning process as do many of their students. In this case, the SITAP materials suit their learning styles. It may be true that other kinds of materials or procedures will be needed to effectively address the issues of differing learning styles. The SITAP materials, however, are a first step in the individualization of the Teaching Improvement Process.

For teaching improvement program personnel, the success of this approach should provide a good indication of whether or not faculty can collect and analyze data regarding their own teaching performance, which can then be used as the basis for improvement strategies. In addition, the improved cost-effectiveness of the Clinic Process makes that service viable for programs with limited resources. The reduction in the number of hours devoted to each client indicates that a small staff could work with a large number of clients using the SITAP or a similar program. It is not expected that this approach will appeal to all faculty. Some will continue to desire a specialist to perform the data collection and analysis functions. However, the SITAP approach represents flexibility within the offerings of a faculty development program and a willingness to meet individual needs.

The implementation of this approach will result in a change in

the role of the Teaching Consultant. Rather than having to supervise the entire process of data collection and perform analyses, the Teaching Consultant will enter the Process when faculty have identified their teaching strengths and areas needing improvement. This will concentrate the Teaching Consultant's work on improvement activities, investing that function with more importance and energy.

Finally, the results of this study open the question of the need for supporting materials, perhaps for the development of improvement strategies. Such materials could be designed to guide faculty in the development of teaching improvement strategies based on their self-analysis. This is a reasonable step to follow the implementation of a self-instructional approach to teaching analysis.

CHAPTER II

REVIEW OF THE LITERATURE

The review of the literature is divided into three major sections. In the first are presented two dominant analyses of the divisions of thought in the field of instructional improvement, and an overview of types of programs and conceptual frameworks. The discussion in the second section is based on major research on individual learning differences, presenting the diversity of learner characteristics as a rationale for individualized instruction. The third section is an overview of techniques for individualizing instruction, and reports current findings concerning the impact and relative effectiveness. Also provided in the third section is a review of materials for improving instruction that are currently available or under study and which are in some way either self-paced or moderated self-instructional programs.

The organization of this chapter reflects the three major areas of research and study that most directly impact on the development and implementation of a self-instructional program for teaching analysis. Such a self-instructional program is an instructional improvement activity, is appropriate to the operational style of individuals who enjoy non-traditional learning experiences, and is developed based on guidelines for similar instructional materials that are used in college courses.

The Improvement of Instruction

Bergquist and Phillips (1977) note that "Higher Education in the United States has undergone in the last ten years a transition so profound as to be revolutionary" (p. 3). Many of the forces acting upon higher education institutions, programs and instruction are cited in Chapter I. In addition, the same forces that have been mobilized to address inequities in society have, since the late 1960s, turned their evaluative focus on the quality of instruction in post-secondary institutions. Student dissatisfaction with their educational experiences is one factor that has led to demands that institutions and individual faculty be held accountable for the quality of instruction provided. Due to the pressures from students and other extra-institutional sources, systems for course and instructor evaluation have been implemented at many U.S. colleges and universities. According to Bergquist and Phillips (1977), it has been found that, "University teaching was frequently ineffective, at times incompetent" (p. 4). They also note that the Danforth Foundation's Annual Report for 1964-65 suggests "'that nearly every discussion of student unrest points out the relation of that problem to the poor teaching that is often found on college and university campuses'" (p. 4).

Gaff (1975) asserts that "Teaching is the primary . . . professional activity of faculty" (p. 4). If teaching is an instructor's major professional responsibility, and many perform this task "ineffectively" or "incompetently," the reality of the quality of instruction in higher education and the thoroughly defensible expectation of

its excellence are widely discrepant. For the learner, this discrepancy is unacceptable and potentially injurious to his or her academic (and perhaps post-baccalaureate) career.

For faculty, a comfortable assumption has been challenged. It has traditionally been assumed that knowledge, publication, and active research in one's discipline qualified one to provide college level instruction. This position has been threatened by an increased emphasis on the instructor's ability to provide classroom experiences that are clearly designed to facilitate learning. In addition, as Wilkerson has noted (Clinic to Improve University Teaching, 1977), the premise that teaching is an art, unteachable in itself, is being systematically eroded by research that shows the relationships between the presence or absence of particular skills of teaching and student achievement and attitudinal change (p. 6). Such relationships are noted in the work of Allen and Ryan (1969), Hildebrand, Wilson and Dienst (1971), Berliner (1973), and Gage (1975).

The importance of the instructional role and the ineffective performance of many who assume that role suggest that intervention is required to encourage faculty to develop teaching skills and apply alternative instructional frameworks. There exists the need to remedy the ineffectiveness of instruction in higher education and to assist faculty in improving their instructional competence.

The discussion thus far has focussed on the performance of the individual faculty member. It is not necessarily with the individual, however, that the responsibility for ineffective instruction lies. It may be that the instructor must implement an ineffectively

designed course, or is laboring within a curriculum structure that is inappropriate or antiquated. It may also be that the structure of the academic department or the institution hinders experimentation and new approaches. It may, of course, be all of the above. It is in response to the needs of the entire instructional system that instructional improvement, with its subcategories of faculty, instructional and organizational development (Gaff, 1975) has appeared as "a potential candidate for a new paradigm for higher education" (Bergquist and Phillips, 1977, p. 4).

There are currently two major categorizations of the various philosophies, orientations and services in the field of instructional improvement. Gaff (1975) has presented a comprehensive statement of definitions and issues regarding instructional improvement, and provided a "state of the art" review of programs and constraints. Bergquist and Phillips (1977), building on their previous work (1975) as well as that of Gaff, have expanded the scope of instructional improvement and provided more sharply defined categories of services. These works represent both the most comprehensive and most current overviews of the state of instructional improvement. In order to provide a meaningful statement of the characteristics of instructional improvement programs and services in higher education, these two categorizations are summarized and discussed below.

Jerry G. Gaff--Toward Faculty Renewal, 1975. Gaff (1975) states that most instructional improvement programs "rest on a common set of assumptions and have the same general goal of improving instruction" (p. 8).

In dividing the kinds of instructional improvement programs into the three categories of faculty, instructional and organizational development, he notes that the approaches are different but related. These categories serve to distinguish among improvement programs whose conceptual frameworks, services, and levels of intervention vary according to client groups, institutional needs and policies, general mandate, and authority to effect change. Emphasized throughout Gaff's work is the theme that although "these approaches are conceptually distinct, . . . the extent of conceptual purity" should not be overestimated--"the distinctions are useful for understanding a wide range of activities that are carried on in the name of instructional improvement" (pp. 10-11).

The three approaches identified by Gaff are here discussed as distinct types of efforts to improve instruction. Throughout the discussion relationships among the approaches are mentioned, but it is considered important to identify the definitive characteristics of each approach so that the extent of service and impact may be understood.

Faculty development. Faculty development, as defined by Gaff, is that approach to instructional improvement that has as its primary aims; "enhancing the talents, expanding the interests, improving the competence, and otherwise facilitating the professional and personal growth of faculty members, particularly in their roles as instructors" (p. 14). The primary focus of faculty development programs is to improve the quality of individual instructional performance. A consultant or team, working in one-on-one or small group formats, assists

faculty to clarify improvement needs, implement activities to meet those needs, and devise strategies for evaluating change efforts.

Gaff identifies twelve principles guiding faculty development programs. Noteworthy among the concepts presented by Gaff is that "teaching makes demands on the whole personality of the instructor" (p. 17). Two factors cited by Gaff as affecting an individual's involvement in faculty development activities are intrinsic motivation to change and environmental support for change. Throughout his discussion of principles, Gaff returns to the theme that individuals function as part of an instructional system, and that change in the individual will affect the system.

Gaff identifies principal categories of faculty development services that differ primarily according to the personal variables considered most appropriate to intervention. These services include expanding faculty knowledge of other disciplines and community issues and organizations, encouraging awareness of issues in higher education and teaching-learning processes, developing instructional skills, facilitating affective development, providing feedback structures regarding instructional performance, and improving student learning (pp. 30-44).

It is in improving student learning that the distinction between faculty and instructional development becomes less clear. Instructional development programs seek to improve courses, curricula and materials, all of which may be affected by attempts to individualize instruction.

Instructional development. Gaff identifies instructional de-

velopment as "a rather recent academic specialization that may be defined as the systematic and continuous application of learning principles and educational technology to develop the most effective and efficient learning experience for students" (p. 47). Instructional development focuses on improving student learning rather than teaching behavior.

A four step instructional development process described by Gaff guides most activities of such programs, and is applicable to virtually every kind of instructional activity. The stages of the process are: the formulation of clear, specific and measureable learning objectives, the design of learning activities to help students reach objectives, the evaluation of the success of learning activities, and the revision of objectives, learning activities and instructional methods.

Instructional development services may include informing teachers of instructional options, implementing wholly restructured or newly formulated curricula, and introducing or producing instructional materials (pp. 60-67).

Instructional developers attempt to acquaint faculty with the options available to them to vary their instructional activities, convince faculty of the merit of alternatives, and assist in the design and implementation of alternative instructional modes. The similarity between faculty and instructional development is apparent when the function of informing faculty is considered. When faculty development programs are designed to educate faculty regarding alternative instructional methods (perhaps to overcome a discerned deficiency in teaching

performance), they are given a function quite similar to that of instructional developers who may be considered as providing the resources about which faculty learn.

Organizational development. The final category of instructional improvement programs identified by Gaff is organizational development. Programs utilizing organizational development services to improve instruction focus on the total instructional environment. Gaff states that "organizational development takes whole institutions or their subunits as its focus and seeks to improve their overall functioning, primarily by systematically applying principles of group process and change" (p. 76). Theories and strategies for organizational development in higher education come most directly from the work of those with major roles in the development of industrial and medical organizations. Gaff identifies five categories of services offered by organizational development programs which focus on various groups within the institution as well as the institution as a whole.

Approaches to organizational development may include "utilizing work groups, training campus leaders, providing training in interpersonal relations, facilitating faculty development, and forming institutional policies" (pp. 86-92). Groups such as committees, task forces, and departments may be trained through seminars, workshops and other knowledge building activities to increase their awareness of issues, procedures, and strategies for improving their processes and interpersonal activities. Training campus leaders in skills of leadership and management includes assisting department chairpersons and deans in learning to supervise work groups and dele-

gate tasks and authority. Providing interpersonal relations training may be accomplished in a number of formats and settings, although recent experience has shown that training programs may provide more meaningful results when scheduled in the actual working environment. Facilitating the personal and professional growth of individual faculty is seen as an organizational development activity in that improved individual performance will affect the overall performance of the organization. Strategies may include implementing a reward system for effective teaching, or department offered grants for instructional experimentation. Forming institutional policies that emphasize the importance of the instructional role will facilitate faculty involvement in improvement activities.

Gaff provides the most comprehensive survey of instructional improvement programs and services currently available. Dividing the general framework of instructional improvement into the three previously specified areas, he notes the most prevalent assumptions guiding each, and the services these assumptions generate. Building upon his work, Bergquist and Phillips (1977) have advanced a similar but essentially distinct framework for describing the work of instructional improvement programs.

William H. Bergquist and Steven R. Phillips--A Handbook for Faculty Development, Volume Two, 1977. Bergquist and Phillips have further refined the categorizations of instructional improvement programs and services, and considered in further depth their conceptual differences and similarities. The overall categories of instructional im-

provement are the same as used by Gaff with the addition of three further distinctions in services; community development, institutional development, and meta-institutional development (p. 9). The distinctions among the various approaches to instructional improvement are clarified by Bergquist and Phillips, who categorize the services differently than does Gaff. The work of Bergquist and Phillips represents the most recent categorization of instructional improvement programs. Their refinements and considerations are based on previous work by the authors (1975), and the studies of Gaff and others.

Faculty development. Many of the activities specified by Gaff as parts of this approach are included by Bergquist and Phillips. Both state that the primary focus of faculty development programs and services is the individual faculty member. However, Bergquist and Phillips differ from Gaff in that they focus on the personal development of faculty--Gaff's "encouraging affective development," and assisting individuals to examine and improve their group functioning skills. Gaff includes here instructional skill training and classroom improvement strategies. The Clinic Teaching Improvement Process, which focuses on specific teaching skills, would be included here by Gaff but not by Bergquist and Phillips.

Instructional development. Bergquist and Phillips include in this category course design, educational technology, and curriculum development, as does Gaff. The major difference between the two categorizations is that those activities designed to improve an instructor's use of teaching skills and techniques, such as microteach-

ing, are included here by Bergquist and Phillips. In this way the professional role of the faculty member is separated from the interpersonal aspects of his or her professional life, and his or her values, attitudes and beliefs, which are addressed through faculty development activities.

Organizational development. Included under organizational development are many of the activities identified by Gaff to improve group functioning. The major difference in Bergquist and Phillips' approach is the level of intervention regarded as the "highest" level approached by organizational development services. The authors consider the academic department or school to be the limit of functioning for organizational development services. A separate category has been established for activities designed to improve institutional functioning.

Bergquist and Phillips have noted that, although the client groups are specific, faculty, instructional and organizational development services may have generalized impact across the instructional system. For example, instructional development activities and organizational improvement strategies will have impact on the individual faculty member and affect his or her performance in some way. This is a major reason for the similarities among the approaches despite their obviously discrete foci. The authors have divided activities into the categories of "Structure, Process and Attitude" (p. 9) to indicate the nature of change. They distinguish the level of services by specifying the focus of activities and services. Bergquist and Phillips state that "perhaps the most serious weakness of . . . [pre-

vious] models is that instructional development is limited to the process level and organizational development is limited to the structural level. This . . . model indicates, however, how an intervention like instructional development can have impact at not only the process level but at the level of structure and attitude as well" (pp. 9-11). The implication for instructional improvement programs is that their services of assisting faculty to clarify attitudes, values, and beliefs will affect instruction and organization; that efforts to acquire teaching skills may well change attitudes regarding students and teaching styles; and that examining the ways in which one functions in group settings will have impact on one's classroom activities as that knowledge affects teacher-student as well as colleaguial relationships. In order to assist the reader to fully understand the framework presented by the authors, a discussion of the characteristics of community, institutional and meta institutional development follows.

Community development. Community development focuses on the relationship between the institution and the various groups, organizations and resources in the non-academic community. That the community and institution may provide resources and services to benefit each other's functioning is assumed, and facilitating the sharing of information, personnel and resources constitute some of the major goals. The ways in which these goals may be accomplished will vary among programs and institutions, depending on the needs and available resources. Services may include "community support networks, intergroup negotiation, and community building" (p. 9).

Institutional development. Institutional development projects include the design and implementation of instructional improvement programs. In addition, institutions may organize research and development centers and develop programs or policies that reward efforts to improve instruction. Gaff's activities under "facilitating faculty development" (organizational development) may be included here. Activities in this category are geared to effecting improvement in the overall functioning of the institution. Individuals, courses, curricula, schools, and departments are considered as being influenced and affected by institutional development projects and activities.

Meta-institutional development. Programs in this category are concerned with issues and services that thave impact on the field of Education, whole institutions, and consortia of institutions. Groups of institutions working collaboratively to accomplish goals and provide for excellence in all academic fields (i.e. through the sharing of instructional staff) are major considerations in this framework. In addition, developing and training individuals in change-oriented professions (p. 9) geared to facilitate the improvement of education may be undertaken.

A primary assumption guiding instructional improvement programs is that college and university teaching can be improved. The approaches to enhancing instructional effectiveness described herein reflect the services and programs that are designed to improve instructional performance, and some of the ways in which those services and programs may be implemented. The relationships among the various approaches

underscore the benefits of one program offering activities and services oriented to more than one level of institutional functioning; removing the individual or the instructional process from the organizational constraints within which they must function or be carried out is unrealistic. Should the resources of a program not permit an eclectic approach to instructional improvement, the effects, for example, of microteaching on the organization in which the participants must function, should be acknowledged and discussed.

The remaining sections of this chapter emphasize the improvement of learning for students. The focus is instructional development. In the following section of this chapter is discussed the nature of individual differences in learning style.

Individual Differences and Learning Styles

> "When confronted with an intellectually capable learner whose performance has failed to measure up to his supposed potential, psychologists and educators have tended to attribute this failure to an emotional block, a personality conflict, or to social class factors. Little attention was given to how learning could be improved simply by concentrating on the way in which an individual works and learns and whether the expectations or methods of instruction, controlled by the teacher or the machine, sufficiently utilized the strengths in the learner's style of learning" (Sperry, 1972, p. 2).

According to Newsom, Eischens, and Looft (1972), individual differences among learners consist of "those distinct characteristics which each learner brings into the learning situation and which inevitably interact with the distinct variables of each learning task" (p. 388). The distinct characteristics to which they refer have been described by Cross and Fields (1974) as "those mental abil-

ities, physical characteristics, personality traits, cultural backgrounds, interests, motivations, behavioral and response mechanisms that make each person unique" (p. 34).

Witkin (1976) distinguishes among the "cognitive styles" of learners in terms of "field-independence and dependence," indicating the extent to which an individual relies on environmental variables for problem solving. Briefly, field-independent learners are considered more analytical. They will determine which data are relevant to a problem, and formulate a structure in which to fit the data to find the solution. Field-dependent learners require predetermined structures in the content for problem solving. No individual is entirely field-independent or field-dependent. The classifications represent the extremes of a continuum of cognitive functioning on which no learner exclusively occupies either category.

Prerequisite to designing learning experiences geared to the individual differences of learners in the classroom is the determination of the nature of learning differences within the group. As Sperry (1972) notes, "When instruction is geared to personality and achievement needs, general and specific intellectual capacities, idiosyncratic or personal styles of learning, and within appropriate expectation levels, it would necessarily follow that learning performance should be superior to other methods which are geared to the needs, capacities, styles and expectation levels of the hypothetical mean student in the classroom group" (p. 3). A number of approaches have been designed to assist learners in the identification of their learning style strengths and weaknesses.

Grasha and Riechmann (1974) have developed the "Grasha-Riechmann Student Learning Styles Inventory" which classifies students as having characteristics of six categories of learning styles. No learner occupies one particular style, but dominant characteristics may be identified to indicate the general category in which a learner's style may fit.

Another learning style inventory has been advanced by Kolb, Rubin and McIntyre (1974). The authors describe a model of learning and problem solving which consists of four learning modes; "concrete experience, reflective observation, abstract conceptualization, and active experimentation" (p. 29). They note that this inventory is intended to determine the importance of each stage to the individual learner so that he or she can determine which learning modes he or she tends to emphasize. A notable difference in the approaches of Witkin and Kolb, et al. is that Witkin does not indicate that an individual can be trained to become field-independent, while Kolb indicates that understanding one's present style will enable one to acquire new skills.

A system for "cognitive style mapping" has been developed at Oakland Community College (1972). Through the completion and scoring of an assessment instrument, an individual may determine the dominant ways in which he or she approaches learning and problem solving. Some measurements include "the ability to acquire meaning through spoken words," the ability to determine relationships in content, the ability to "maintain positive communication interaction which significantly influence the goals of the persons involved in that interaction," and

"the influences of one's peer group" (p. 1).

Grasha and Riechmann, Kolb and associates, and Oakland Community College researchers have applied principles of learning and motivation to devise instruments for measuring individual learning styles. Fitting the characteristics and variables into typologies of styles of learning has been accomplished by a number of researchers, who attempt to place learners and their cognitive styles into categories of development, behavior, and task approaches. The typologies and studies described below are representative of the nature of categorizations of learning styles, and illustrate the major kinds of learning differences present in the classroom. In addition, the diversity in orientation to the question of learning style differences reflected in the following studies illustrates the varied approaches to such research.

Developmental schemes and typologies.

William G. Perry, 1970. Perry has advanced a scheme of the "evolution in students' interpretation of their lives evident in their accounts of their experience during four years in liberal arts college" (p. 1). The first five developmental stages described by Perry indicate the development of the individual from a "dualistic absolutism and toward . . . acceptance of generalized relativism" (p. 57). From the fifth position, where knowledge and values are seen as dependent on many and diverse variables, the individual progresses further to a recognition of his or her need to determine his or her personal values and committments in a pluralistic world.

The nine stages defined by Perry include: (1) Basic Duality, in which the learner judges experiences and knowledge as completely "right" or "wrong," and ascribes a parental authority to instructors; (2) Multiplicity Pre-Legitimate, where the learner perceives the diversity in thought and values, but considers them an aberration of the "truth"; (4) Multiplicity Correlate, or Relativism Subordinate, during which the learner may develop one of two perspectives, those of considering diversity a "temporary fuzziness in authority's domain" (p. 97), or an understanding that one answer may be right, but the "rightness" of that answer depends on the perspective of the questioner. Stage (5) is Relativism Correlate, Competing or Diffuse. In this stage, the learner undergoes a "radical reperception of all knowledge as contextual and relativistic." (p. 109). The notion that knowledge and values are the property of authority is rejected. Stage (6), Committment Foreseen, is occupied by the learner who recognizes the need to become oriented among relativistic knowledge, values and beliefs through the formation of a personal committment to some direction and goal.

Stages (7) through (9) are grouped by Perry as the final advancements toward the learner's autonomous functioning in society. These stages, Initial Committment, Orientation in Implications of Committment, and Developing Committments represent a progression from the choice of direction and goals through a recognition of the consequences of one's decisions, to the perspective that committment is continuous and expresses an individual's life-style and attitudes.

Students occupying these stages utilize diverse decision making and thought processes. A uniform instructional environment for all

will suit only those learners occupying the position to which it is appropriate. Learners in the four stages which require structure and guidance in their educational experiences will be immobilized by an unstructured, self-directed learning experience. Those occupying the later stages require a great deal of autonomy and challenge, and will rebel against structured educational activities.

Attending to the learning style difference in a given classroom is an essential task for the professor. As will be seen from the following typologies of learning styles, student behavior in the classroom can reveal much about the stage at which an instructor may find his or her students. Once recognized, the diversity of styles and approaches to learning constitutes a mandate for individualization on the recognition of which by the instructor a student's academic success may depend.

Anthony Grasha and Sheryl Riechmann, 1974. Grasha and Riechmann have presented a typology defining six student learning styles, based on students' feelings about learning, their perceptions of students and instructors, and their reactions to educational activities. The "Grasha-Riechmann Student Learning Styles Inventory" was developed "on the basis of interview and questionnaire data obtained from students . . ." (p. 214). The six general styles of student learning are: (1) the independent student, who is self-directed in learning activities; (2) the dependent learner whose style is to focus on required learning, looking to the instructor for direction and guidelines; (3) the competitive learner, whose motivation is to get good grades and perform better than his or her classmates; (4) the learner

whose style is to share ideas and get involved in classroom activities, considered collaborative; (5) the participant learner, who seeks to become centrally involved in activities and discussions, but does not initiate learning; and (6) the avoidant learner, whose behavior indicates a lack of interest in course material and the absence of motivation to participate in classroom activities. It should be noted that the typology generated by Grasha and Riechmann describes learning styles in terms of instruction-related behavior. A somewhat more evaluative typology is presented by Mann and his associates (Mann, Arnold, Binder, Cytrynbaum, Newman, Ringwald, Ringwald and Rosenwein, 1970).

Richard D. Mann, 1970. Mann's distinctions among learners are based on their orientation toward tasks, their socialization activities, and their modes of interaction with others in the classroom. Mann's categories are quite similar to Grasha and Riechmann's, differing in the division of behavior and the terminology with which behavior is described. It is felt, therefore, that an elaborate description of Mann's categories is unnecessary. The styles are: compliant students, heroes, snipers, attention seekers, and silent students. The behavioral characteristics of students in most of these categories may be inferred from their labels. In essence, students who are self-directed in their approach to learning are termed independent. Those who, for social or academic reasons, either do not want to be in the classroom or view learning experiences as opportunities for socialization include the heroes, snipers, and silent students. This statement in no way implies a lack of ability or desire

to learn. Students who are "field-dependent," needing guidance from authority figures, include the anxious dependent students, attention seekers, and discouraged workers. The discouraged workers are those who do not perform well, yet continue to participate and follow authority-originated guidelines for learning.

The work of psychologists and educators in this field clearly indicate that differences exist in the ways in which individuals approach a learning task, and the processes they employ to succeed academically. Perry's work shows that a clear process of development occurs in the college years, and that the stage at which a student enters a learning experience will determine how he or she responds to the teaching style of the instructor and achieves stated objectives. The typologies of Grasha and Riechmann and Mann, et al. describe for educators the behaviors that represent diversity in learning style among their students. A prescriptive approach to meeting individual needs remains to be developed.

With regard the the latter, an application of the instructional development process described by Gaff (1975) in the previous section may be suggested. An instructor wishing to meet individual needs has as a major goal the individualization of instruction. Before that goal can be achieved, a profile of the learning styles present in the classroom must be developed. The work of Kolb, et al., Oakland Community College, and Grasha and Riechmann may be useful in this context. Using one of these approaches to determine student needs will lead the instructor to the second process stage, that of developing learning experiences to meet those needs. In evaluating the experiences, crucial

data would be the extent to which the experiences were consonant with student learning styles. During the final stage, revision of learning activities and objectives, the further refinement of learning activities to address individual needs would be undertaken.

It is with the second stage of the instructional development process, choosing learning experiences that meet individual needs, that the final section of this chapter is concerned. While it is not presently desireable to diagnose an instructional problem and prescribe a particular approach as its solution, examining the instructional alternatives will provide useful information regarding how individual needs may be met, and to what extent the teaching styles, instructional environment, and organizational structure need to be altered.

Meeting Individual Needs Through Non-Traditional Instructional Modes

Based on the work of Goldschmid and Goldschmid (1973), three categories of individualized instructional methods may be determined, based on the degree of individualization and the amount of student participation in the design, choice of content and sequence of learning activities. The least individualized non-traditional methods are termed "instructional options" (p. 17), and include such activities as offering optional projects and small group activities within the context of the traditional classroom. A greater degree of individualization is achieved through activities in the category of modular instruction. Such activities require the student to work through alter-

native instructional units to achieve a specified level of content mastery. The third category involves the negotiation of content, structure and evaluation criteria between instructor and student. Termed "contract learning" in this chapter, this category includes strategies which "seek to place the developmental prescription squarely in the student's own hands" (Woditsch, Schlesinger, Giardina, and Litwin, 1975, p. 2).

Johnson and Johnson (1970) state that "teachers are potentially the most sensitive, flexible and responsive components of any instructional system" (p. 4). The implementation of any of the options mentioned above requires a great degree of flexibility on the part of the instructor and the willingness to recognize and address the diversity of the student group. In addition, the instructor must be willing to spend large amounts of time and energy to experiment with and refine alternative instructional strategies. As Ainsworth (1976) has noted, implementing individualized instructional activities is more difficult than adhering to traditional lecture-discussion techniques. It requires more time, energy, and resources but, as stated by Woditsch, et al. (1975), has as "a not unattractive corollary . . . that students, too, give of themselves more intensely" (p. 13).

On the following pages is a review of the characteristic instructional activities within the previously identified categories. In addition, a section is provided detailing some of the major findings regarding the effectiveness of these methods to facilitate learning.

Instructional Options

Goldschmid and Goldshmid (1973) identify four activities considered in this category. These activities are discussion, seminars, the "learning cell," and independent study, all of which allow for increased student participation in classroom experiences. Discussion and seminars are well known to educators. The learning cell is a strategy devised by Goldschmid (1971) which permits students to work in pairs to learn specified content. Independent study involves the negotiation of alternative ways in which course content may be learned, which may or may not include attendance in class and fulfillment of traditional course requirements. It should be noted that independent study is here discussed as an activity within a structured course. None of the above activities require alteration of course content or sequence. Rather, they represent departures from the instructor's usual lecture activities. Additional activities in the category of instructional options include small group activities, role playing, academic gaming, and the use of educational technology to present course content through alternative media.

Modular of self-instruction. There are three major purposes of modular instruction: to offer to the student a choice among a wide range of topics within the subject area, to provide frequent feedback to the student regarding his or her strengths and weaknesses, and to provide for remedial work, if required. Modular or self-instruction is dis-

tinguished by three important characteristics: self pacing, extensive content options, and frequent and immediate feedback. Also characteristic of self-instructional courses or programs is that the content is divided into sequenced units or "modules," each of which must be mastered by the student before the next is begun.

There are a number of techniques, options, and media which can be utilized in conforming to the conditions specified above. Modular instructional techniques may include auto-tutorial materials, programmed texts, specially designed projects and experiments, Computer-Assisted Instruction, and the Personalized System of Instruction developed by Frederick Keller.

Based on findings derived from studies of self-instructional curricula, Ainsworth (1976) notes requisite conditions for self-instructional programs and materials, stating that self-instruction must allow the student to reach a pre-specified and measurable level of mastery. Such materials should be continually available independent of the individuals by whom they were developed. Self-pacing, immediate feedback and choice of content have been mentioned as characteristics of self-instructional materials. Crucial to a definition of self instruction is Ainsworth's statement that self-instruction is "distinguished by the students' interaction with instructional materials rather than with [an] instructor" (p. 278).

Diamond, Eickman, Kelley, Holloway, Vickery and Pascarella (1975) provide a general framework for designing individualized instructional activities. They propose that such activities should include six basic elements:

(1) Flexible Time Frames: Diamond states that an instructional program "should be flexible enough to allow a student to work through it as rapidly or as slowly as he can in order to reach the established goals" (p. 4).

(2) Diagnosis, Remediation and Exemption: The instructor should be able to specify and diagnose the presence or absence of prerequisite skills and learning so that the level of challenge of the material is appropriate for the learner. Based on that determination, the learner should be presented with options for correcting deficiencies or exemption from material previously mastered.

(3) Content Options: Within the field of study, the student should be permitted to choose the specific area of interest he or she would like to pursue. Options should be provided from which the student may choose those most interesting to him or her.

(4) Student Evaluation: Alternate Forms and Flexible Time Frames: This element represents the necessity to provide the student with the opportunity to determine the content on which he or she will be tested and the methods by which the evaluation will be accomplished.

(5) Choice of Location: Students should be permitted to participate in relevant learning activities regardless of the site at which the activity will take place.

(6) Alternate Forms of Instruction: The provision of a variety of instructional modes to address individual learning styles is an important element of individualized instruction. Within modular instruction, this variety may be provided by supplying alternative media for students to use in their instructional activities.

Closely related to Diamond's guidelines is the specification of essential components of self-instructional materials, based on the work of Johnson and Johnson (1970), and Weldon (1975). The six basic components are described below.

Pre-test. The purposes of the pre-test are to measure the learner's ability to accomplish tasks involved in the instructional sequence and determine the appropriateness of the level of challenge of the tasks. It is used to determine the presence of skills prerequisite to beginning a module, and may be accomplished formally or informally, in verbal or written form (Weldon, 1975).

Objectives. Objectives stated in the module should be clear, specific, and represent the major outcomes expected of the student working through the unit. They should reflect the criteria on which student performance will be evaluated. Tyler (1949) states that "a clearly formulated objective has the two dimensions of the behavioral aspect and the content aspect" (p. 47). Hence, objectives should specify what should be learned, and which tasks the learner should be capable of doing upon completion of the module.

Learning activities. Weldon notes that there should be at least five learning activities contained in a module. Just as important as the number of activities is the provision of variety in the task and content. Generally, students have the option of choosing a certain number of the learning activities provided, and it is reasonable to assume that their choices will be based on the stimulation of new experiences and their interest in the tasks. Extremely important in the consideration of learning activities is that they be designed to

assist the student in achieving the clearly specified objectives.

Self-test. This component is an opportunity for the learner to measure his or her own progress without supervision or risk of failure. This may be accomplished through a written test with an answer key provided, a list of study questions for the student to consider, or the performance of a relevant task.

Post-test. The post-test represents an evaluation of student learning by the instructor. An important feature of any assessment of learning is that it be consistent with specified objectives and closely related to learning activities. The student should be able to ascertain the general categories of post-test questions by reexamining the objectives. The student should determine when to attempt the post-test, and whether the test involves a formal examination, essay evaluation, or task to be accomplished.

Opportunities for remediation. Through the post-test results, the instructor may determine the specific areas in which a student's performance was deficient and prescribe activities to enable him or her to achieve the required level of mastery. Activities may include repeating sections of the module or studying alternative sources of information. A major benefit to the student is that it is not necessary to re-study large amounts of material in order to pass a general examination on which his or her performance may be deficient on only a few items or sections. The student may determine through his or her performance on the self-test that remediation is needed. In this case, the student may inform the instructor that certain parts of the material are unclear, and the instructor may assist the student in remedi-

ation.

Contract learning. Activities within this category include those which permit the student a great degree of autonomy in the design of his or her entire academic program. While content options provide a limited level of individualization within an existing course, and modular instruction provides for the individualization of whole courses or sections of courses, contract learning allows the student to determine the content, activities and structure through which his or her academic goals will be accomplished. Strategies for contract learning that may be implemented by departments or institutions include external degree programs, time-shortened baccalaureate programs, interdisciplinary courses, individualized degree programs, and independent study (Woditsch, et al., 1975, p. 2).

The Impact of Non-Traditional Instructional Methods

The Instructor. Seagren (1974) notes that "the instructor is . . . becoming a designer of learning experiences" (p. 4) rather than a dispenser of information. Goldschmid and Goldschmid (1973) state that "the implementation of any [individualized instructional] system . . . calls for a major shift in the professor's traditional role" (p. 19). As the professor's traditional role shifts to that of a facilitator of learning experiences, a number of skills will be needed in order for the professor to effectively perform that function. He or she must become familiar with the individualized instructional methods he or she wishes to employ. In addition, he or

she must become skilled in alternative teaching methods for the traditional classroom to provide for more meaningful interaction with students. The professor must become aware of learning style differences and learn to diagnose academic problems and provide remedial activities. Woditsch et al. (1975)refer to this changing role when they state that implementing learner-centered curricula and programs represent "an added responsibility to the educator" (p. 1).

In light of this changing role, a need emerges for programs and services by which faculty may be trained in the skills they need in order to implement non-traditional instructional methods. Such services are offered in higher education institutions by faculty, instructional, and organizational development programs. Faculty may turn to instructional development programs for assistance in the formulation of objectives, design of learning experiences, and structuring of courses. They may consult faculty development programs for assistance in learning about students and their own teaching performance. Departments may individualize curricula and academic programs with the aid of organizational development programs and activities.

Before faculty engage in any development activities, it is necessary to provide information concerning the benefits of altering traditional teaching methods. Perhaps the best evidence is presented in studies which seek to determine the effectiveness of individualized instructional activities in facilitating student learning.

The student. "Since the instructor has traditionally been a dispenser of information, the student has been a passive receiver" (Anastasio,

1978). Individualized instructional approaches demand that the student assume the major responsibility for his or her own learning. Most students are ill-equipped to handle the autonomy of a less structured learning experience because they are accustomed to a passive role in the traditional classroom. It is possible, therefore, that students will encounter as much difficulty initially with individualization as instructors encounter in its implementation. Hence, a new role for the student is indicated by the responsibility to master the content, rather than to perform comparatively better than his or her peers.

Woditsch, et al. (1975) have surveyed the research studied performed to determine the effectiveness of non-traditional instructional methods. They note that most of these studies have attempted to show individualized instructional approaches to be superior to traditional approaches in facilitating student achievement. Notable among their conclusions are that "the outcomes of learner-centered curricula are no worse than (i.e. at least as good as) the outcomes of comparable traditional curricula, and "learner-centered curricula that clearly specify outcomes and the sequence of activities required to achieve them exhibit more success in demonstrating achievement than those that do not" (p. 12). Strongly implied by Woditsch's first conclusion is that, as individualized instructional methods have been found to be at least as good as traditional methods in fostering student achievement, they are actually superior to traditional methods if they meet the development needs of students through a focus on appropriate learning processes. Findings that support Woditsch's conclusion in-

clude those of Fernald and DuNann (1975), who state that "students receiving individualized instruction become more proficient in evaluating their own mastery of subject matter . . . and . . . learn to become their own feedback monitors" (p. 33). Jernstedt (1976) cites research efforts which "found that . . . individualized groups performed significantly better on the final exam than did the traditional group, and when testing a sample of each of these groups 10 months later, found that the sample from the individualized section was still better in performance than the traditional sample" (p. 211). Both authors quality these findings in the light of factors not considered in the studies. For example, Jernstedt notes that the major learning activity for the individualized group centered around essay-style writing, while the traditional group received the usual lecture. The examination was in essay form, hence the individualized group had been "trained" for the test. Fernald and DuNann note that, while students are better able to evaluate their own learning as a result of participation in individualized activities, this is not necessarily reflective of improved achievement. However, there are clear benefits to students participating in individualized activities--if not in achievement, then perhaps in the ability to become life-long learners.

Individualized Instructional Improvement Activities

The opportunity for great diversity in the provision of development services for faculty certainly exists. Individualized approaches to skill acquisition, instructional development and teaching analysis

may be utilized by all faculty, but particularly by those who, like their students, vary in their orientation to learning tasks and their style of operation in a learning role. At present, most individualized and self-paced materials available to faculty are concerned with course design, the development of behavioral objectives, and processes for instructional development. Some of the more widely recognized resources are explained below.

Davis, Alexander and Yelon (1974) guide the reader through a process by which he or she may learn the importance of stating objectives, teaching for different kinds of learning, and designing appropriate instructional sequences to meet objectives. The book may be used as a programmed text in a course, or as an individualized study guide. Supporting materials include student and teacher manuals and a series of 12 filmstrips with cassette narration.

Diamond, et al. (1975) have written a similar manual, geared to assisting faculty to individualize their courses and instructional sequences. This self-instructional manual guides the instructor through the elements of instructional program design previously cited in this chapter.

The above works are characteristic of the instructional development materials available to faculty for independent learning and development. In addition, Weldon's (1975) series of six cassettes and Johnson and Johnson's (1970) manual provide directions and guidance for instructors to write their own self-instructional materials. There are self-instructional materials which seek to help faculty improve their teaching skills or interpersonal processes. An ex-

ample of the former is a self-instructional microteaching course developed by Perrott, Applebee, Heap, and Watson (1976). This course enables instructors to proceed through the steps of microteaching to refine their use of a particular teaching skill. The work of Kolb, et al. enables an individual to assess his or her operational style and determine how that style affects the functioning of a group.

Lacking among such individualized materials for faculty have been materials designed to assist faculty in examining their use of a range of skills and instructional methods in the classroom, providing for feedback and information from a variety of sources to determine teaching strengths and areas needing improvement. Materials developed at Purdue University, by the writer at the Clinic to Improve University Teaching, and by McCarthy (1978), address specific skills and suggest developmental approaches. However, a comprehensive approach to self-instructional teaching analysis has not been available to faculty. It is this lack of similar materials and the findings of Centra (1976) that form the rationale for the Self-Instructional Teaching Analysis Program. The SITAP materials are described on the following pages, in Chapter III.

CHAPTER III

METHODOLOGY

The primary purpose of the present study was to obtain faculty perceptions of the usefulness of a self-analysis of teaching performance using the Self-Instructional Teaching Analysis Program. Four major activities comprised the project: (1) the development of the SITAP materials, (2) the identification of a group of instructors to constitute the study sample, (3) the use of SITAP by the sample members, and (4) the determination of participants' satisfaction with the experience. Two types of data were gathered. The first dealt with the perceptions of the usefulness of SITAP by its users. The second type of data concerned the activities of the researcher in the role of Teaching Consultant during this project.

The SITAP materials were developed by the researcher between December 1976 and November, 1977. The study sample utilized SITAP during the Spring semester of 1978. When the sample members had completed SITAP, the researcher interviewed each participant to obtain his or her reactions to the program. Participants' perceptions were recorded during the interviews and on a short questionnaire. The sampling and data collection procedures, and materials used in this study are described below.

Sample Selection

In October, 1977, the researcher initiated a random sampling procedure by which 15 University of Massachusetts faculty were to be recruited to form the study sample. There were three criteria which participating faculty were required to fulfill: (1) they must not have participted in the Clinic Teaching Improvement Process; (2) they must have been teaching undergraduate courses with enrollments of 25 or more; and (3) they must have been full time instructors.

Eighteen names were chosen at random from a listing of University instructional staff. A letter (see Appendix B) describing the SITAP materials and the project was sent to all instructors in the sample and was followed by telephone contact to determine their decisions regarding participation in the study. The responses were entirely negative. Two subsequent mailings followed by telephone contact produced two positive responses. A total of 53 faculty were contacted in this manner. The two individuals willing to participate were introduced to SITAP by the researcher, and subsequently declined to participate, citing a fear of committing extensive time to pursuits outside their normal activities which they felt had higher priority.

It was decided after receiving 53 negative responses to initiate a procedure whereby participants were recruited through the acquaintance of faculty known to the researcher as his previous Clinic Process clients. In this manner, three University of Massachusetts faculty were identified and approached by the researcher. Two agreed

to participate in this study.

In order to complete the required sample, the researcher contacted individuals at a community college and two four-year institutions. The Dean of Faculty at the community college was contacted, and met with the researcher to provide the names of individuals he felt might be interested in a program such as SITAP. Of 13 individuals so identified, nine were contacted by the researcher. Three agreed to participate. The two faculty members at four-year institutions were recruited on the basis of their acquaintance with the researcher and their interest in the SITAP materials.

At this point, seven college faculty were included in the study sample. As this study is exploratory, this sample size was considered sufficient to determine general statements of the usefulness of the self-instructional approach. In addition, McCarthy (1978) utilized a sample of similar size to determine the effectiveness of a self-instructional manual for the improvement of skills relating to the facilitation of student participation in the classroom. He was able to determine the effectiveness of that intervention through the analysis of data obtained regarding instructors' use of his materials, despite the limited sample size. It was also felt that the size of the sample chosen for the present study was affected by the unsuccessful attempts to identify a random sample, and by the question of the limited appeal of the self-instructional method.

Soon after the sampling of college faculty was complete and the project begun, the researcher had the opportunity to implement SITAP with seven high school teachers. Through a course taught by

the researcher and two associates, the high school teachers were recruited to utilize SITAP as an optional learning activity. They obtained the benefits of learning about an innovative teaching assessment procedure and developing an in-depth analysis of their teaching performance.

The sample for this study consisted of 14 individuals. Of these individuals, 9 were male, five female. Three instructors were in their first year of teaching at their institutions, five had two to 10 years experience, and six had 10-20 years experience. Tables 1 and 2 illustrate the relevant characteristics of the study sample, reported according to instructional level.

Perhaps the most important distinction among the participants is the level at which they teach. Four instructors are faculty members at four year institutions, three at a community college, and seven in a high school.

All but two of the high school teachers had been teaching at least ten years, and were chairpersons of their departments. The five department chairpersons were interested in the possibility of using SITAP as a supervision technique to assess the performance of teachers in their departments, and regarded it as a possible alternative to currently used evaluation procedures.

Development of Materials

There are two groups of materials in this study: the Self-Instructional Teaching Analysis Program used by the participants, and data collection instruments designed for this study. These materials

TABLE 1

Distribution of Participants by Sex and Instructional Level

	High School	Community College	Four year and University	Total
Male	4	2	3	9
Female	3	1	1	5
Total	7	3	4	14

TABLE 2

Teaching Experience of Participants According to Instructional Level

	High School	Community College	Four year and University	Total
First Year Teachers	0	1	2	3
Two-10 Years Teaching	2	1	2	5
10-20 Years Teaching	5	1	0	6
Total	7	3	5	14

are described below.

The Self-Instructional Teaching Analysis Program. The SITAP materials were developed as an alternative approach to the data collection and analysis stage of the Clinic Process. Any implementation of SITAP is expected to precede the further improvement strategy and reassessment stages of the Clinic Process. It is not intended to replace that Process; rather, it represents an effort to improve the cost-effectiveness of that service by reducing the amount of time required of the Teaching Consultant to provide the Clinic Process service to faculty.

The SITAP manual was designed to include the requisite components of self-instructional materials identified by the authorities cited in Chapter II. The program is intended to fulfill three major purposes: (1) to help faculty accomplish an in-depth analysis of their own teaching performance at their own pace and with minimal intervention by teaching improvement program staff, (2) to enable faculty to become more familiar with assessment procedures that may be continually used to monitor their teaching performance, thereby building self-development skills, and (3) to reduce the amount of Teaching Consultant time devoted to each Process participant.

There were three major stages in the development of SITAP. First, the critical components and procedures of the Clinic Process were identified for inclusion in the manual. Second, self-instructional protocols for each task and supplementary informative sections were written and compiled to form the SITAP manual. Third, this first draft of SITAP was critiqued for style, content and organization by four University of Massachusetts faculty and two graduate students in Education.

The manual was revised based on the comments received and the judgment of the researcher. The resulting version of SITAP was distributed to participants in February and March, 1978.

The SITAP manual contains three distinct sections: Introductory materials explaining the nature of the program and the tasks involved, "Module One: Data Collection," and "Module Two: Data Analysis and Review." Module One activities are designed to enable the user to record his or her feelings regarding current teaching performance and collect data including student ratings of instruction, a videotaped sample of teaching, and the perceptions of an in-class observer. The second module gives instructions on how to analyze the data, and determine which skills are considered most critical to the instructor's teaching style and situation. Of these critical skills, the major strengths and weaknesses are identified.

Module One: Data Collection. Included in this module are five activities designed to enable the SITAP user to collect data about his or her use of teaching skills from four sources: his or her own perceptions of teaching performance, students, a videotaped sample of teaching, and an in-class observer. A number of instruments are used by faculty to complete these activities.

The two forms utilized to record the instructor's pre-intervention self-assessment constitute the first two activities of SITAP. The "Preliminary Considerations" response form enables the instructor to record the general goals for the course, his or her preferred teaching techniques and methods, and general feelings about teaching. The second requires the instructor to complete the Teaching

Analysis by Students, in the same way his or her students do during the third activity, to provide a self-rating on the 38 skill items on TABS. This facilitates the comparison of perceptions through the uniformity of items and responses.

The Preliminary Considerations response form functions as a type of pre-test to the SITAP program. In addition, the final determinations of strength and weakness may be compared to those responses in a general way, to identify changes in attitude toward teaching performance or the course.

The third data collection activity is the student TABS administration. The TABS questionnaire has been in use since 1971 by the Clinic and other teaching improvement programs to obtain student ratings of instructors' use of 20 teaching skills and behaviors. Students are asked to rate the instructor's performance on a four-point scale which indicates the extent of improvement needed. A fifth response category allows students to designate a skill as not necessary for the course.

In addition to the skill-related items, the TABS includes 12 general background questions about students' grade-point averages, general attitudes toward the course and instructor, and preferred learning styles. The TABS has been validated through six years of implementation in various institutions and in numerous subject areas. The participants used the TABS as a student rating instrument, and also as a framework for video-tape analysis. The observed was asked to complete the TABS to the best of his or her ability after the observation(s). The SITAP users complete two forms that become part of the TABS data--a self-assessment, mentioned above, and a Prediction

of Student Responses on TABS, on which the numbers of students who will respond in each category for each item are estimated.

When the student responses, self-assessment, and predictions have been obtained and completed, the instructor contacts the Teaching Consultant for computer scoring of the TABS data. The TABS printout is returned to the SITAP user for use during Module Two activities.

The fourth data collection activity is arranging for a videotape to be made of a class representative of the instructor's usual teaching style and activities. The instructor completes a "Pre-Videotape Information" form prior to the class to be taped. On this form are indicated the objectives, planned activities, and expected student outcomes for the class. The plans may be compared in videotape analysis to the actual events illustrated by the tape.

The fifth and final data collection procedure is the identification of an observer to attend one or more classes, and the performance and discussion of the observation. The researcher designed the SITAP observation form to include those of the 20 teaching skills that are considered to be both observable and related to student satisfaction with instruction. In addition, the preferred modes of observation of Clinic Teaching Consultants were considered. Many prefer to use the observation as an opportunity to ascertain the atmosphere of the class, in addition to recording events which may illustrate the presence or absence of particular skills. The observation form does not, nor is it intended to, provide an in-depth analysis of teaching performance. It represents a suggested framework for the ob-

server to record his or her perceptions of the instructor's teaching strengths and weaknesses. Guidelines and suggestions for the observation are provided for the observer's use, as it was assumed that the individuals chosen to fulfill that role were not likely to be trained to perform the task. The purpose of the observation form is to provide the SITAP user with structured feedback from an individual not associated with the course, a role formerly assumed by the Teaching Consultant.

In addition to the observation form, the activity requires the completion of a "Pre-Observation Information" form by the user, prior to the class to be observed. This form is identical to the one completed prior to the videotape. The intention is to provide a statement of the goals and planned activities for the class, to which the actual events may be compared.

When Module I is completed, the SITAP user consults the "Summary Checklist" to be sure that he or she has obtained the TABS printout, the videotape, the completed observation forms and transparency. If any items are missing at this point, the user is instructed to contact the Teaching Consultant for assistance. If all materials are present and complete, the user proceeds to Module Two.

Module Two: Data Analysis and Review. The first two activities in this module enable the SITAP user to summarize the results of TABS and videotape analysis to prepare for the subsequent activities of Comparisons of Data, Analysis of predictions, Self-Assessment II, Observer II (optional), and the Teaching Performance Profile. The first two activities are considered preparatory to the actual analysis

of data from all sources. Comparisons of Data and Analysis of Predictions are considered the actual data analysis activities. The remaining three activities are grouped as data review procedures, as the results of all data sources are known before their completion. These final activities require the instructor and observer, if desired, to compare their original perceptions with any that may have changed as a result of examining the statements of the various data sources.

TABS analysis requires the instructor to translate the student perceptions reported on the TABS computer printout into a bar graph. The form on which this graph is drawn provides a visual display of the students' responses. Similar in design to the TABS Student Data Report form are the Data Report Transparencies, used throughout the manual to record the TABS responses of the observer, the instructor's videotape analysis, the TABS self-assessment, Self-Assessment II and Observer II. The design of these transparencies allows the instructor and observer to construct graphs of their responses which may then be compared by placing one transparency over another. Student data may be compared to all others by placing the Student Data Report Form under any or all completed transparencies. The differences between the transparencies and the Data Report Form are that the percentage notations to the left of the response categories and the dotted line bisecting the area of the graph appear only on the Data Report Form.

During videotape analysis, the instructor views the tape once in its entirety, then again to select examples of behavior that may

indicate the strength or weakness of a particular skill. When these procedures are complete, the instructor rates the taped performance using the TABS and a transparency.

The third activity of this module is Comparisons of Data. The instructor is required to use the Data Analysis Log to record differences and similarities among the various data sources. The log enables the instructor to compile all analyses, and record the results indicating evidence from the data sources.

The fourth activity is the Analysis of Predictions. Using the form provided, the instructor notes the discrepancies, both positive and negative, between his or her Preliminary Considerations responses, TABS Predictions of Student Responses, and student TABS responses. The SITAP user determines the extent to which his or her predictions were accurate.

When the results of all data sources and the Analysis of Predictions have been noted and recorded, the SITAP user proceeds to the three final SITAP activities. The Self-Assessment II requires the user to complete a second TABS self assessment, using a transparency. This is compared with the first self-assessment and the TABS student data report form. The first comparison is intended to illustrate any changes in the instructor's self-assessment resulting from the examination of the varied perspectives sought regarding his or her teaching performance. The second comparison may be of interest to determine whether the second self-assessment indicates more or less agreement with student perceptions. In addition, if the observer and instructor elect to utilize Observer II, the results of that activity are com-

pared with Self-Assessment II and the observer's first responses to determine the extent of agreement and change. Observer II also requires the examination of all data by the observer prior to the completion of the second TABS assessment.

The final activity of Module Two, and SITAP, is the formation of the Teaching Performance Profile. Referring to the completed Data Analysis Log and Analysis of Predictions forms, the instructor is asked to list those of the 20 teaching skills and behaviors he or she considers most critical to his or her teaching style and situation, the major strengths and weaknesses of the skills listed, and supporting evidence for these judgements. The resulting list illustrates for the user his or her preferred teaching modes and characteristics, and whether he or she performs well on the skills considered important.

Data collection materials used by the researcher. Two procedures were utilized to obtain the necessary instructor perceptions as data for this study. The structured interview and short questionnaire are described below, and appear in Appendix C.

SITAP user feedback form. This form was designed to obtain participants' feelings regarding five major areas of concern: (1) the usefulness of a self-instructional approach to teaching analysis (Item F); (2) the major strengths and weaknesses of the SITAP materials (Items B and C); (3) the relative usefulness of each SITAP activity (Item A, 1-12), (4) difficulties and satisfactory experiences in working through the materials, and (5) participants' desire to

design and implement improvement activities based on their Teaching Performance Profiles (Item H).

Items B, C, D, and E required narrative responses. Items F and H could be answered "yes" or "no"; however, elaboration was anticipated. Item A required forced choices on a scale which required the participants to rate each activity as essential, very useful, useful, less than useful, not very useful, or should be deleted. Responses indicate the usefulness of each activity, in addition to a ranking of usefulness in comparison to other activities.

Structured interview. The interview was intended both to allow participants to elaborate on questionnaire responses and to obtain statements that represent their feelings regarding six additional areas of concern. These were: (1) general feelings about the experience, (2) whether a satisfactory statement of teaching strengths and weaknesses had been achieved, (3) activities omitted and reasons for their omission, (4) the major outcomes and benefits of SITAP, (5) whether the outcomes and benefits justified the time expenditure, and (6) suggestions for revision of the materials. Questionnaire areas that were chosen for elaboration included the usefulness of the self-instructional approach, and the activities considered most and least useful. Elaboration on other questionnaire items was requested if the response on the item failed to answer the question, and was occasionally provided spontaneously by the participants.

Procedures

The activities of the sample were uniform in terms of the SITAP tasks. They differed in the procedures used by the researcher to introduce, facilitate the progress of, and provide closure to the program. The college participants interacted with the researcher on an individual basis. The high school teachers were introduced to the materials as a group, and interacted in this manner through problem-solving and closure. The stages of this project are described below.

Initial meetings. The purposes of these meetings included the introduction and explanation of SITAP, and the determination by the researcher that the participants met the stated criteria for inclusion in the study sample. Specifically, it was here determined that participants had not utilized the Clinic Process, that they were teaching courses at the undergraduate level or below with enrollments of 25 or more, and were full time instructors. The seven high school teachers participated in this meeting as a group. All college teachers were personally interviewed, one by telephone.

For the participants, this meeting was the first exposure to SITAP. Questions and concerns were discussed and the program was explained to an extent that would not jeopardize its self-instructional nature. Participants were instructed to contact the researcher at two points in the program; after administering the TABS to have the data computer scored, and upon completion of module two. In addition, they were instructed to contact the researcher in the event of any difficulty with the materials or tasks. The participants were

told at this meeting that their identities and all data regarding their teaching performance would remain confidential, and that all materials provided as part of the study could be retained for future use and reference when the study was completed.

SITAP activities. The activities previously described were begun by the study sample after the initial meeting. During their use of SITAP, the researcher had little contact with the participants, with the exception of a few difficulties with the materials and procedures, which are explained in Chapter IV. The researcher did assist the high school group in certain data analysis activities, notably videotape analysis and completion of the data report transparencies. This assistance constituted the second meeting with that group mentioned in Chapter IV. Although this assistant was provided, the high school participants did accomplish the actual tasks independently. The researcher clarified certain directions and procedures.

Final meetings. These meetings correspond to the data review meetings between Clinic Process clients and the Teaching Consultant. The discussion of the Teaching Performance Profile takes place, and desired improvement work is discussed and planned. For this study, the meeting represents the termination of SITAP and is intended to provide closure to the experience. In implementing SITAP as a professional development activity, the former would be the primary purpose of this meeting. For the present study, the latter function was its major purpose. The researcher was available as a Teaching Consultant to participants wishing to design and implement improvement strategies.

Data compiled by the researcher. Additional information was recorded by the researcher as the study progressed. These data included the time required of the researcher as a Teaching Consultant to provide the SITAP service to each participant, and the consideration of the depth reached by participants in their analyses. These data are reported in Chapter IV, primarily for college instructors. It was felt that the group nature of the service provided to the high school participants would artificially reduce the amount of time required per instructor, as greater efficiency is certainly achieved by spending two hours with a group of seven rather than seven hours with seven individuals. However, the time devoted to the administration of SITAP to the High School group is reported separately, since a group application of SITAP is considered a reasonable implementation strategy. Consideration of participants' Teaching Performance Profiles is not provided for high school participants, as the SITAP manual as written for this study was intended for college faculty. In addition, all but two of the high school teachers omitted the TABS student data administration, necessitating the consideration of such information only on the basis of the videotape and self-assessment data, which were considered insufficient.

The researcher's preparation of the above data included tabulating forced choice questionnaire responses, compiling logs of interaction with the participants, summarizing narrative questionnaire and interview responses, and reviewing the Teaching Performance Profiles of the college instructors during the final meetings. As this study is exploratory, no attempt has been made to establish the degree of

statistical significance of these results. Questionnaire data that required the forced choice of response are reported by frequency and mean for all participants, and separately for the high school, community college and four-year faculties. Narrative responses are reported according to general trends, and selected quotes from individual interviews and questionnaires are provided to support these trends and illustrate exceptions. Results of these activities appear in Chapter IV, Data Analysis.

CHAPTER IV

DATA ANALYSIS

It should be noted immediately that the SITAP materials and the procedures of this study were intended for utilization by college level instructors. That results presented herein include the perceptions of high school teachers is a departure from that original purpose. However, the information obtained from the secondary school teachers is relevant to this study, as the needs and perceptions of the college and high school groups were remarkably similar and, as the results indicate, an application of SITAP at the high school level is feasible and indicated by the perceptions of the high school teachers utilizing that service.

The decision to include the high school teachers in this discussion is based on three points that surfaced during the final meeting with the group of teachers. First, like their college counterparts, the high school teachers were discouraged by the lack of sensitivity and depth reached by traditional evaluation methods. They stated that the individuals who evaluate their performance are generally detached from the instructional situation and observe or tape only one class, which may or may not be representative of their instructional capacity. The college teachers expressed similar feelings regarding the limitations of traditional evaluation methods, citing that students may be motivated by a number of negative feelings or attitudes that will result in an artificially unfavorable rating. Second, all

individuals in the sample but one, regardless of their instructional level, felt that a self-analysis was the most reasonable, as the instructor can determine his or her own teaching strengths and weaknesses and work continually to define the reasons for those judgements by thoroughly examining all aspects of the instructional situation over which he or she has control. Third, it has become evident in comparing the work of Berliner (Far West Regional Laboratory for Educational Research, 1973) and Allen and Ryan (1969) with that of the Clinic to Improve University Teaching (1972-1977) and Rosenshine (1975) that the critical teaching skills for all instructional levels are, to a considerable extent, similar. During this study the sole criticisms of the skills that formed the focus of the program were that certain skills are applicable only to certain disciplines, class sizes, or teaching styles. These criticisms were advanced by one high school teacher and two college teachers. Hence, the entire sample, regardless of their instructional levels, found the skills generally applicable. In addition, although the materials are geared to the needs of college faculty, all secondary school teachers are trained in institutions of higher education. Frequently, secondary school teachers rely on both their memories of the styles and techniques of those they considered particularly effective teachers during their college careers, and the instruction in pedagogical methods that were part of their training. Their decisions should be based on knowledge of generic teaching skills as well as their opinions of the effectiveness of particular techniques used or presented by their college instructors.

The similarities in needs, perceptions of the usefulness of the self-instructional approach, and the appropriateness of the teaching skills examined during the process justify the inclusion of all instructional levels in the discussion of the questions of concern to this study. The sample considered during this discussion consists of 14 instructors. Certain data, such as the usefulness of each SITAP activity, are reported for each instructional level as well as for the total sample. Data reported for only one instructional level are identified as such. All data reported for the entire sample include breakdowns of responses or explanations of differences, where they exist, according to instructional level.

Data Analysis Procedures

For the purposes of the present study, three primary categories of data have been analyzed by the researcher: (1) SITAP users' perceptions of the usefulness of the self-instructional approach to the assessment of teaching performance, (2) The usefulness of each SITAP activity to the accomplishment of such analyses, and (3) the time required of the researcher to administer the SITAP service to the participants. In addition to these major categories of data, the questionnaire and interview schedule items that were intended to provide supplementary information are considered in the discussion of the major data categories to which they pertain.

Questionnaire and interview items that were related to SITAP users' perceptions of the usefulness of the self-instructional approach included "Do you feel you achieved a satisfactory statement of your

teaching strengths and weaknesses?" and "Do you feel such an activity should be offered to other faculty at your institution?" Items considered related to the usefulness of SITAP activities were "Did you perform all activities required in the manual?", "Which did you omit?", "Why?", "What do you consider to be the major weaknesses of the SITAP materials?", "What were the major difficulties you encountered in working through the materials?", and "What were the most satisfactory experiences in working through the materials?" Responses to the question "What do you consider to be the major outcomes of the program, in terms of benefits you derived from its use?" indicate the participants' general feelings about SITAP and its usefulness as a self-instructional approach to teaching analysis. Items that provided information related to the time required to administer the program included "How much time (in hours) would you say the program required?" and "Do you feel the benefits to you justified that expenditure of time?"

Questionnaire data requiring a forced choice of response are reported according to the frequency of response in each category for each instructional level, and the mean rating by the total sample. Narrative questions and interview responses are reported according to general trends in the participants' statements. Responses indicating disagreement with the majority response are reported as well. Conclusions are based on the overall responses to the item, and in some cases are presented according to the instructional level to which they most reasonably pertain. For example, the time required of the researcher to provide the SITAP service to the high school group was far less

than that required by the college teachers. Hence, separate judgements are made as the group nature of the researcher's interaction with the high school teachers would artificially reduce the amount of time required to implement the individualized SITAP service. In addition, as SITAP was intended for use by college teachers, certain explanations were necessary for the high school group which represented unusual activities for the program's implementation.

Interview or questionnaire data have been obtained and analyzed for all participants. However, three college teachers and the entire high school group did not wish to have their final meetings audiotaped. Hence, formal transcripts are not available from which to obtain quotes. One participant did not return the completed questionnaire. His responses to the narrative questions were obtained during the final meeting. Items requiring a forced choice of response are analyzed according to an N of 13.

In order to fully consider the results of this study, a discussion of the researcher's attempts to identify a random sample must be provided. The nature of the responses to his requests for participation are described below.

Random Sampling Attempts

The procedures used by the researcher to attempt to identify a random sample are described in Chapter III. Of the 53 University of Massachusetts faculty contacted by letter, 37 were subsequently reached by telephone. The remainder were either unavailable or did not have office telephones. In the latter instances, the researcher

left messages requesting that faculty return his calls. Such messages were left up to five times. The calls were not returned, which was assumed to indicate a lack of interest in the project. Unfortunately, the reasons for these individuals' failure to respond to the researcher's calls are not known, and no assumptions regarding those reasons can be safely made. However, it can be assumed that the messages were received, and the calls were deliberately not made.

Of the 37 faculty contacted by phone, six were not planning to teach during the Spring semester. Twenty-nine instructors declined to participate in this study. Two of the 29 initially indicated willingness, but later decided not to participate due to their perception that the time required to participate in the study was not available to them.

Of these negative responses, most were simple "no"'s to the researcher's request. Those who provided some reason for their refusal most often cited their feelings that their other professional responsibilities had higher priority. In addition, some responses indicated that faculty are not familiar with, or disagree with, the notion that there are specific, learnable skills of teaching. Such statements included that of one instructor who felt: "when I am interested in what I am teaching, I teach well. When I am not, I don't. So this program wouldn't be of any use to me, as I already know that." Another response was "I've been teaching for more than twenty years. I think I already know my teaching strengths and weaknesses."

Another reason cited by some faculty was the perception that since their courses were to be evaluated at the end of the semester

anyway, proceeding through an elaborate teaching analysis process was unnecessary, and therefore the time expenditure could not be justified. The individuals responding in this manner indicated that general course-related feedback was all that they required to measure the effectiveness of their instructional performance. Student ratings providing information of this nature were perceived as sufficient.

The implications of these responses are discussed in Chapter V, Discussion. The information is here presented so that the contrast between the negative responses of University of Massachusetts faculty and the perceptions of the study sample regarding the usefulness of the service may be seen.

The remaining data of concern to this study are presented according to the previously identified major data categories. Included in those sections are analyses of related questionnaire and interview items.

Instructor Perceptions of the Usefulness of the Self-Instructional Approach

Thirteen respondents to the question of the usefulness of the self-instructional approach to teaching analysis stated that they felt it was a useful method for determining instructional strengths and weaknesses. One dissenting opinion was that "it seems far less efficient than would an interview and observation by a consultant." The response to this item, then, was 13 SITAP users, or 93%, indicating that the approach was useful. Statements in support of the approach included:

--Because it is up to you as an individual to take this seriously and to work out problems. Self-motivation plays a big role.

--It made me realize my self-concept.

Two positive responses were qualified to indicate that the participants consider the approach useful "if approached seriously" and "if all parties cooperate."

During the final interviews, two participants stated that they preferred the self-analysis approach to similar services performed by a specialist. Their responses were:

--I think it's the only way. I'm going to get mad at a consultant because I can't relate to his views. I can relate to my own, in terms of how I see me and compared to others, but unless I internalize it, if it's only external, then nothing can come of it.

--I think [self-analysis] is really enlightening, because I was able to sit down and think about it. If you had come in here and had done all the analysis I would have sat down and said, "oh, that's very surprising." I probably would have gotten something from it, but with this process, I had time to think. I was able to reflect back on it and think, "What did I say specifically to [students] to express that?"

The overall responses to this question indicate that faculty agree with the instructional improvement program directors surveyed by Centra (1976) in their perception that a system to determine their own teaching strengths and weaknesses is useful. In addition, Centra's finding that services involving specialists are considered useful is illustrated for faculty in this study by the individual who felt a specialist's role would make the program more efficient, and by the desire of many participants to implement improvement activities with the help of the Teaching Consultant.

It is reasonable to expect that individuals considering a

particular service useful would realize the outcomes of that service. All participants expressed during the interviews that they felt they had achieved a satisfactory statement of their teaching strengths and weaknesses. Again, to this question, there were some qualified responses. Two participants added that they felt the major difficulties in their teaching were not addressed by the 20-skill format of the program. Others felt that the complexity of certain data analysis tasks hindered the development of such a statement. However, all participants felt that of the skills addressed by the program, their strengths and weaknesses were identified to their satisfaction through the use of SITAP.

Responses were generally favorable to the question of offering SITAP to other faculty at the participants' institutions. Thirteen participants stated "yes" to this question. The following statements were included in elaboration:

--I feel it would be better if some mild inducement were provided to help more faculty to participate.

--I believe in the fall I will be working to introduce a program of this sort.

Although most participants responded positively to this question some responses were qualified, indicating limitations of the materials. Two participants felt the service should be offered "if time permitted" or "with modifications." Of the faculty responding positively to this question, five indicated that they felt it should be offered, but some inducement for faculty to participate should be determined in the form of a reward for participation and interest in teaching. One instructor felt that a major reason it should be offer-

ed was the inadequacy of his department's evaluation form. The entire high school group undertook SITAP for the purpose of assessing it as an alternative to currently used evaluation procedures. That they felt it should be offered to other teachers is significant in terms of their possible application of the program.

In summary, 13 of the respondents to the question of usefulness of the self-instructional approach considered it useful. Two considered it more appropriate than a similar service provided by an improvement specialist. All participants felt that, with some reservations regarding the limitations of the skill categories and the materials, they had achieved a satisfactory statement of their teaching strengths and weaknesses. Thirteen instructors felt that the service should be offered to other faculty at their institutions. Generally, these findings suggest that instructors interested in determining their own teaching strengths and weaknesses consider the self-instructional approach useful and worthwhile.

The Relative Usefulness of SITAP Activities

Participants were asked to rate each SITAP activity on a six-point scale to indicate their feelings regarding the usefulness of the activities in terms of their facilitation of a self-analysis of teaching performance. The rating scale included the following possible responses: 1=essential; 2=very useful; 3=useful; 4=less than useful; 5=not very useful; 6=should be deleted. The mean ratings of activities are summarized in table 3. Means are based on the number of questionnaire respondents actually completing each activity.

TABLE 3

Mean Ratings of the Usefulness of Each SITAP Activity by Those Using the Activities and Completing Questionnaire Items A, one through 12

	N*	mean	High School n	High School mean	Community College n	Community College mean	Four-year College n	Four-year College mean
Preliminary Considerations	13	2.07	6	1.8	3	2	4	2.5
TABS Self-Assessment	13	1.7	6	1.6	3	2	4	2.25
TABS Student Data Administration	9	1.3	2	1**	3	2	4	1.5
Videotape	11	1.8	6	1.6	3	1.6	2	2.5
Observer	12	1.8	6	1.5	3	2	3	2.25
TABS Analysis	9	1.6	2	1**	3	2.3	4	1.5
Videotape Analysis	9	2.1	6	1.8	2	2.5	1	3
Comparisons of Data	10	1.8	4	1.3	3	2.6	3	1.7
Analysis of Predictions	11	2	5	2	3	2.6	3	1.3
Observer II (optional)	4	2	2	2.5	0	0.0	2	1.5
Self-Assessment II	6	1.16	4	1.5	0	0.00	2	2
Teaching Performance Profile	8	1.5	4	1.5	2	1.5	2	1.5

*Where total N is less than 13, the activity was omitted by a number of users equal to the difference between the stated n and 13.

**Based on the responses of two high school teachers who used the TABS activities.

The activities indicated as essential to very useful were Self-Assessment II (mean = 1.16), TABS Student Data Administration (mean = 1.3), the Teaching Performance Profile (mean = 1.5), TABS Analysis (mean = 1.6), TABS Self-Assessment (mean = 1.7), videotape (mean = 1.8), the Observation (mean = 1.8), and Comparisons of Data (mean = 1.8). The lowest mean ratings were given to Videotape Analysis (mean = 2.1), Preliminary Considerations (mean = 2.07), Observer II (mean = 2), and Analysis of Predictions (mean = 2). The lowest mean rating, 2.1 for Videotape Analysis, indicates that the activity was considered useful to very useful, but not essentially to the determination of a profile of strengths and weaknesses. These ratings shows that the activities contained in SITAP were considered useful by the instructors utilizing them.

The percentage of responses in each category across questions, based on 117 total responses of a possible 156 from 13 questionnaires, was as follows: (1) 44%, (2) 30.7%, (3) 20.5%, (4) 4%, (5) 0%, (6) 0%. The extremely positive nature of these responses must be compared with participants' decisions to omit particular SITAP activities. Some of the most highly rated activities were also the most frequently omitted. Of the 13 questionnaire respondents, all but two omitted the optional Observer II activity. Six participants utilized all required activities. Table 4 indicates the number of participants omitting each SITAP activity.

Omission of SITAP Activities. There were five major reasons cited for the omission of particular activities: (1) a perception that the goals

TABLE 4

Frequency and Percentage of Participants
Omitting Each SITAP Activity

	Total N=13	Omissions %	High School n(6)	%	College n(7)	%
Preliminary Considerations	0	00	0	0	0	00
TABS Self-Assessment	0	00	0	0	0	00
TABS Student Data Administration	4	30.7	4	66.6	0	00
Videotape	2	15.3	0	0	2	28.5
Observation	1	7.6	0	0	1	16
TABS Analysis	4	30.7	4	66.6	0	0
Videotape Analysis	3	23	0	0	3	42.8
Comparisons of Data	3	23	2	33.3	1	16
Analysis of Predictions	2	15.3	1	16.6	1	16
Observer II (optional)	10	76.9	4	66.6	6	85.7
Self-Assess-ment II	8	61.5	3	50	5	71.4
Teaching Performance Profile	5	38.4	2	33.3	3	42.8

of the activity could be achieved more easily without the self-instructional protocols,(2) lack of time to complete the program, (3) a feeling that, although time was available, the activity was too cumbersome, (4) a feeling that the activity would not be useful, and (5) misunderstandings regarding the necessity to work though all activities. The most frequently omitted activity was Observer II (76.9%). This was acceptable, as the activity was optional. Of the activities not specified as optional, the most frequently omitted was Self-Assessment II (61.5%). Participants interviewed indicated that the Teaching Performance Profile was sufficient to achieve the goal of Self-Assessment II. The other frequently omitted activities were the Teaching Performance Profile (38%), the TABS activities (30.7%), and Comparisons of Data (23%). A major reason cited in most cases was the first mentioned above, that the goal could be more easily achieved without the self-instructional protocols. Of these results, the potentially most frustrating to the researcher was the omission of the Teaching Performance Profile, as this was intended to be the major outcome of SITAP. However, interview responses to the question of its omission indicated that the participants felt they had achieved a satisfactory statement of their teaching performance. To the question, "What do you think are your major teaching strengths and weaknesses?", those omitting the formal Teaching Performance Profile activity identified between three and five skills or TABS items in each category, and cited a number of data sources as evidence. The omission of the activity, therefore, does not indicate that the outcome was not achieved. The frequent omission of TABS administration and

analysis is due to the decision of the majority of high school teachers to omit the TABS. The omission rate for college faculty was 0%.

The most frequently omitted activities overall were the final three data analysis and review activities. The major statement of these results is that the latter activities of the program were omitted because of time constraints, complexity of the tasks, or the feeling, as stated above, that the self-instructional protocol was not needed to achieve the desired outcome. The results for the college teachers conform to the mean for the total sample.

The major differences among instructional levels regarding the omission of particular activities indicate that instructors may omit those assessment procedures with which they are least familiar. The high school group most often omitted the TABS activities (66%). Other than Observer II, Self-Assessment II, and the Teaching Performance Profile, the college teachers most often omitted the videotape activities. Teaching assessment at the high school level has traditionally been accomplished through observation and, more recently, videotape. These activities were accomplished by all high school teachers, and were among the most highly rated by that group. At the college level, evaluation is most often performed through student ratings of instruction. No college teachers omitted the TABS activities, and all rated the TABS Student Data Administration and Analysis as essential or very useful.

Although omitted by eight of 13 faculty (61.5%), Self-Assessment II received the highest rating of all activities (mean = 1.16)

from the instructors who used it. TABS Student Data Administration, TABS Analysis and the Teaching Performance Profile were among the most highly rated, and the most frequently omitted. This implies that instructors utilizing these activities consider them useful, yet for reasons not related to their usefulness, other instructors chose to omit them. Perhaps, if the participants omitting these activities had received more direction from the Teaching Consultant or if more emphasis were placed in the materials that those activities were mandatory, they would have accomplished them. It is suggested that, had they accomplished the activities, they would have found them useful.

Major strengths and weaknesses of SITAP. The most frequently cited strength of the SITAP program was the self-exploratory nature of the process. Such responses included:

--The major strength is that it does get one to look at himself in the act of teaching.

--Major responsibility for improvement lies with the one most familiar with the details of the performance--the instructor.

--It forces a close look at one's own work.

Another strength of the materials noted by three participants was the determination of a profile of teaching strengths and weaknesses. SITAP users felt that:

--It made me aware of critical teaching skills, and helped me to plan my lectures.

--Working with the Teaching Consultant and the materials have helped motivate me to work on some aspects of my teaching which I feel need improvement.

--It may aid an individual to overcome a known difficulty.

Other strengths noted by SITAP users were the practicality of the program, the clarity of organization and instructions, and a number of specific activities that were considered particularly worthwhile, including the TABS, videotape and observation.

The weaknesses of the SITAP program as perceived by its users were more specific to the materials themselves. Among these were the inability to compare the general Preliminary Consideratons responses with the skill-specific TABS responses, the complexity of the data analysis tasks (particularly the completion of the transparencies), the emphasis on reporting differences (rather than similarities) in the data sources during analysis, and the time required to work through the program. Most participants utilizing all or most of the activities stated that the researcher's estimate of the time required (eight - 12 hours) was fairly accurate. They also stated that they felt that amount of time was excessive.

High school teachers most often stated that the TABS was a weakness of the materials in terms of a secondary school application of the program. They felt that if it is to be used at that level, it should be altered in terminology. One college teacher responded that he felt that the skill areas about which he is most concerned were not addressed by the program. A limitation of the self-analysis approach was identified by one high school teacher who stated that the TABS "allows one to rationalize away unsatisfactory results by attributing results to certain students whom the teacher . . . has not any confidence in." It is possible for SITAP users to explain away unfavorable ratings from any data source. This was not the case for

any participants in this study.

SITAP experiences: most satisfactory and major difficulties. In each case, the participants' most satisfactory experiences in utilizing SITAP were in some way expressed as participating in or examining the results of data analysis. Learning about the different perspectives obtained from the various data sources through TABS Analysis, videotape and observation data were often mentioned. In addition, those using the TABS stated that they benefited from the comparison between student ratings and their self-ratings. Most stated that the multiple data source approach provided meaningful information. Other satisfactory experiences included the specification of clear and manageable skill areas for improvement, "finding my predictions were close to correct," a higher rating by others than one's self, and the provision of concrete evidence for judgements regarding teaching strengths and weaknesses.

The difficulties cited involved the time required to complete the program, inconsistencies in the design of the transparencies, and the complexity and quantity of data analysis tasks and forms. It was the perception of four college participants and one high school teacher that the transparencies were very difficult to complete for two reasons: first, that the dotted line above the item numbers did not coincide with the placement of the numbers and second, on the TABS student data report form, that the distance between "0" and "50%" was half the distance from "50%" to "100%." Other data report forms were seen as unnecessary or too time consuming for the task required.

Many participants stated that the detailed TABS analysis task was unnecessary for someone accustomed to reading computer output.

Criticisms of the TABS questionnaire were fairly common, particularly among high school teachers. Three college participants felt that the TABS included many items that were not specific to their instructional situation. Others felt that additional items were needed to address important skills for teaching their discipline. For example, a college physics teacher stated that skills he considers important that are not addressed specifically by the TABS include the organization of his lectures and his command of the subject matter. The high school teachers rejected the TABS for two major reasons: they felt the terminology of the instrument was too advanced for their students, and that their students could not be trusted to provide meaningful information. Other difficulties of the program included:

--Motivation. I often felt I had more important things that needed to be done.

--Understanding some of the directions.

--Analyzing the Teaching Performance Profile.

Two participants stated that they found no difficulties in the program.

Major benefits of SITAP. During the interviews, the participants were asked what they perceived to be the major benefits of utilizing the SITAP materials. Most stated that the opportunity to compare one's own perceptions to others' was a major benefit. In addition, participants mentioned "the variety in opinions," and the determination of specific skill areas that were strong or needed improvement. One par-

ticipant noted a resolution of anxiety regarding his performance:

> --I've learned from this . . . not to worry about some aspects [of my teaching] that I was perhaps overly concerned about, so that's less mental energy that I have to expend in those areas.

Other participants stated that their heightened awareness of the existence and nature of a range of teaching skills was a major benefit. One such statement was typical of the feelings expressed:

> --It certainly made me aware of how I should be teaching, and it made me think about it all the time.

In addition, a major benefit of the program was that it forced the user to look within, to examine not only their external behavior but also the attitudes and feelings on which those behaviors are, in part, based. The requirement to examine the reasons for one's behavior resulted in a reassessment of the appropriateness of techniques and methods, and in some cases an examination of the modes of teacher-student interaction. As one high school teacher stated:

> --It may lead to a change of method to change other's impressions even if you believe your previous method was successful.

In summary, the participants in this study generally felt that the activities they utilized as part of the SITAP materials were useful or essential to the determination of their teaching strengths and weaknesses. The variety in perspectives obtained through the use of SITAP was seen as a major benefit. The most satisfactory experience of the majority of participants was the comparison of information among the various data sources (although the structured SITAP Comparisons of Data was not seen as essential). Although many participants omitted major activities, the satisfaction of those performing the activities omitted by their peers suggests that the omitted sections would

be of benefit to most faculty. All participants felt they had achieved a satisfactory statement of their teaching strengths and weaknesses, of the skills that formed the focus of the program. There were some clear benefits to faculty using the materials, and some difficulties with the materials that need to be corrected before future applications are attempted.

Time Required of the Teaching Consultant

In Chapter III, the researcher noted that the reduction of the amount of time required of the Teaching Consultant to administer the Clinic Process was a major purpose of the SITAP materials. The Clinic Process requires approximately 20 hours of Teaching Consultant time per client, 10-12 of which are devoted to data collection and analysis procedures. The remaining eight-10 hours are concentrated in designing, implementing and evaluating improvement activities.

The SITAP materials are intended to place the responsibility for data collection and analysis with the Clinic Process client, thereby making the Clinic Process less staff-intensive. Before the implementation of SITAP, it was not known how much time would be saved. The actual amounts of time devoted to the college and high school participants are reported separately due to the previously stated differences in SITAP implementation procedures.

College participants. The researcher spent an average of slightly less than three hours with each college participant. The greatest

amount of time required by any participant was slightly more than four hours. Table 5 illustrates the kinds of interactions that occurred between the researcher and participants and the average duration of each. The general categories of interaction were introduction of materials, solving difficulties with the materials or SITAP procedures, obtaining and returning raw TABS data and computer printouts, and providing closure to the experience at the final interview. The difficulties experienced by the participants of which the researcher was informed prior to the final interview included one instructor's inability to secure videotape equipment from his department, and another instructor's concern that the pens mentioned in the manual were not included. The researcher videotaped the class for the first instructor, and informed the second that due to cost limitations the pens were not provided. This individual found the necessary instruments and continued with the SITAP tasks. Also included as difficulties were telephone calls made by the researcher to determine the reasons for apparent delays in completing the TABS. In some cases, individuals had neglected the SITAP materials until reminded by the researcher. None of the difficulties cited in the previous section were mentioned before the final interviews. Participants apparently worked around the inadequacies in the instruments and forms, mentioning them only upon reflection. The researcher had no indication of these problems until the final meetings.

The average time of two hours, 36 minutes represents a reduction in Teaching Consultant time of approximately 75% for data collection and analysis. This figure certainly indicates an improvement

TABLE 5

Mean Duration (in minutes) of Five Kinds of Interaction Between the Researcher and each College Participant

	Community College		Four-year College		College	Total
	n	mean	n	mean	mean	N
Initial Meeting	3	30	4	32	31	7
Obtain Raw TABS Data	3	30	2*	27	23	5*
Return Computer Printout	3	36	2*	19	26	5*
Final Interview	3	50	4	32	40	7
Solving Difficulties	2	5	2	67.5	36.25	4**
Mean Total Time		150 (2 hrs 30 min)		177.5 (2 hrs 48 min)	156.25 (2 hrs 36 min)	8

All times include travel to institutions other than the University of Massachusetts. "Return computer printout" includes data processing, i.e., time spent at computer center, key punching, etc.

*Two college teachers hand-scored the TABS data

**Only four participants contacted the researcher for assistance with the materials.

in the cost-effectiveness of the Clinic Process. Further support for this conclusion is provided by the suggestions that faculty felt they had achieved a satisfactory statement of their teaching strengths and weaknesses, and the seriousness and enthusiasm with which they approached and accomplished the SITAP tasks. In addition, many participants felt they would like to continue with improvement activities, indicating that they regard the remaining stages of the Process as valuable. One college instructor stated that he would like to administer the TABS at the end of the semester to check on his progress.

Logs of the researcher's interaction with the participants are provided in appendix D. The reader is referred to these logs for an explanation of the precise nature of the interactions with each participant.

High school participants. The researcher visited the high school on three occasions for the specific purposes of introducing, facilitating the use of, and providing closure to the SITAP program. These meetings required approximately 90 minutes, two and one-half hours, and two hours, respectively for a total of six hours. Hence, the amount of time devoted to each of the seven participants in the high school group was approximately 51 minutes. As has been previously stated, the group nature of the provision of the SITAP service to the high school group greatly increased the efficiency of that service. No average for the entire sample has been reported, as the efficiency realized in the group application would distort the time required to administer SITAP, which was intended to be an individualized service.

A group application is considered reasonable and useful, based on the high school participants' feelings that their experience was worthwhile. However, as this was not the researcher's original intension, no average time for the total sample has been provided.

An issue closely related to the time reduction for the Teaching Consultant is the increase in time that obviously must occur for the client. Faculty perceptions of whether the time requiremen- is reasonable, and justified by the benefits realized from the program, are provided below.

Time required of the SITAP user. The time required to proceed through the SITAP materials varied according to the activities actually accomplished by the users. Those performing all required tasks in the materials stated that the researcher's original estimate of eight to 12 hours was fairly accurate. The time required for participants omitting TABS activity was approximately six to eight hours. those college teachers who omitted the formal analysis activities, observations, or videotape reported a time expenditure of from four to six hours. It is assumed from the statements of those who utilized all activities that the program (in its current form) would require eight to 12 hours to complete. It is evident that the Teaching Consultant time saved through the Use of SITAP is transferred to the faculty SITAP user. An important question that arises from this conclusion is whether faculty consider the time expenditure justified by the benefits realized from the program.

Time expended by the user versus benefits of the program. During the final meeting, the high school teachers agreed that the dual benefits realized from the use of SITAP justified the time required to complete it. They were introduced to a new approach to teaching analysis which may find application in their institution, in addition to accomplishing an in-depth analysis of their own teaching performance.

The college teachers stated, with some qualifications, that the benefits to them did justify the time required. The individual who did not feel the self-instructional approach was as useful as an approach utilizing the services of a specialist also felt that he could have better utilized his time without the time-consuming tasks of SITAP. He further stated:

> --I think that a lot of the effort in doing this seems far enough away from the main issue that it's difficult. The effort I spent (on the transparencies) was a little beside the point.

Another college teacher said that she considered the time expenditure justified by the outcomes of the program, but thought "that some things probably could have been a lot shorter," also citing the transparencies as creating the greatest difficulty and time expenditure.

In support of the program, the remaining six college teachers did not qualify their responses that the time was justified by the outcomes. One participant elaborated:

> --Of course. You know, if we spend our lifetimes doing this it seems ridiculous not to take the time. I've taught for 20 years, and not to be willing to spend six hours looking at what I'm doing at this point, or how well I'm doing, would be . . . irresponsible.

One participant stated that there should be more insistence from the Teaching Consultant that the tasks be accomplished by a cer-

tain date. He regretted that he had used the entire semester to accomplish data collection and analysis, leaving no time to implement improvement activities. He saw this as a drawback, but felt that his time had been well spent.

The major issue for many of the participants was the sort of "gnawing anxiety" that this program had to be finished. It was "constantly on their backs" throughout the semester. Five participants stated that the time would be justified to a greater extent, were there some financial or other incentive for faculty to utilize SITAP. Their motivation to perform the tasks was not at a constant level throughout the semester, and the program was forgotten at times in favor of other tasks and responsibilities. The suggestion is that, with appropriate incentives, the outcomes of the program would justify the time required to complete it.

Determination of teaching strengths and weaknesses. During the interviews, the researcher obtained the completed Teaching Performance Profiles (if available), or asked the instructors what they considered to be their major teaching strengths and weaknesses according to the list of skills in Appendix A of SITAP (SITAP, pp. 37-38). In all cases, the participants' responses indicated that they were concerned about the effects of poor performance of particular skills on their students, identified major skill areas that were indicated as needing improvement by more than one data source, and discussed possible strategies for improvement.

Skills that were typically found as strengths included learning, environment, student participation, expression (speaking skills),

and interpersonal relations. Instructors determining that these skills were strong were generally fairly pleased about those conclusions. Skills that were identified as needing improvement included methods and materials, pacing, elaboration, closure and enthusiasm. For many instructors, the determination of these weaknesses was a disturbing outcome. Most felt that their enthusiasm for the subject matter was evident, and that their methods and materials were varied and provided interesting activities for students. In no case did an instructor dismiss such conclusions as unimportant or irrelevant. All were seriously considered, and in some cases interventions were discussed to improve their use of these skills.

Generally, the skills considered by the instructors included those thought to affect student achievement and/or attitudinal change (Wilkerson, 1977b). Such an outcome indicates that SITAP users seriously considered their task, and reflected deeply and thoughtfully on the results of their analyses of data.

Plans for improvement. Four college teachers and four high school teachers indicated that they would like to design and implement improvement strategies based on the results of their Teaching Performance Profiles. Of these participants, two intend to consider in further depth the results of the program and try new techniques in their classes when next they teach. These results suggest two conclusions. First, these eight participants wish to change their performance of the teaching skills they feel could affect the quality of their

teaching performance. Second, the six participants who do not wish to implement improvement strategies were satisfied with the Teaching Performance Profile as a final outcome to their efforts. These results suggest that SITAP is successful both as a modification of the Clinic Process (in that it helped motivate its users to want to improve) and as an activity for teaching assessment independent of the Clinic Process.

Summary

SITAP was designed to accomplish three major purposes: (1) to facilitate the in-depth analysis of teaching performance by the user, (2) to enable the faculty user to become more familiar with teaching analysis procedures and techniques that may be used to monitor their teaching performance, and (3) to reduce the time required of the Teaching Consultant to administer the Clinic Process to faculty clients. The data discussed on the preceding pages indicate that these purposes were accomplished through the use of SITAP.

There are a number of findings discussed in this chapter which indicate that a self-analysis of teaching, achieved through the use of materials such as SITAP, is a service perceived as useful by instructors wishing to determine their own teaching strengths and weaknesses. This information supplements Centra's (1976) finding that instructional improvement program directors consider such a service useful. The 75% reduction in the time required of the Teaching Consultant per SITAP user indicated that the Clinic Process, already shown to be a service that faculty consider useful

(Erickson and Sheehan, 1976), can be modified to improve its cost-effectiveness, as well as to provide additional benefits to faculty. In addition, the researcher was successful in implementing the data collection and analysis procedures of the Clinic Process with 14 instructors in one semester--more than twice the allowable client load per Teaching Consultant at the Clinic.

The ratings of the usefulness of SITAP activities provided two distinct conclusions. First, there was little disagreement among participants using each activity as to its usefulness. Second, those omitting activities did so for a number of reasons, many pertaining to the design of the materials and tasks. Paradoxically, instructors omitting activities because they were perceived as not useful are contradicted in their judgements by the participants at the same instructional level who, upon accomplishing those same activities, considered them "very useful" to "essential" to determining a statement of teaching strengths and weaknesses.

The most frequently identified strength of the SITAP materials was the self-exploratory nature of the process. Many instructors noted that examining one's own performance is beneficial, as it "forces a close look at one's own work." The most frequently cited weakness of the SITAP materials was the time required to complete all the activities. Related to the time requirement was the perception that the materials were overly complex. This complexity was often cited as a reason for the omission of particular activities.

Most participants considered the self-instructional approach useful. Some considered it more useful than they would a similar

service performed by a specialist.

Comparisons between the self-analysis of college participants and the judgements of the researcher as an experienced teaching consultant indicate that the participants did address serious issues and examine honestly their teaching styles and performance. The primary justification for this conclusion comes from statements made during the interviews and the researcher's examination of TABS and other data prior to obtaining the participant's final statements.

That the high school teachers may implement SITAP in their institution reflects the conclusion that users did learn about assessment procedures. The use of the TABS by two high school teachers illustrates that some SITAP users implemented assessment procedures with which they were not familiar. In addition, the ratings of usefulness for data collection activities by those utilizing them indicate that all data collection procedures-TABS, observer, and videotape-were considered very useful by the high school and college teachers who used them. The analysis of these data sources provided familiarity with them as approaches to provide new perspectives of teaching performance. The statement of one college teacher that he may use the materials in future semesters indicates that an opportunity has been provided for self-initiated efforts to assess the instructors' use of teaching skills.

The implications and conclusions of these data are discussed in Chapter V, Discussion. In addition, the limitations of the study and the generalizations pertaining to these conclusions are discussed.

CHAPTER V

DISCUSSION

The results of this study detailed in Chapter IV indicate that the SITAP materials represent a successful technique for the self-assessment of teaching performance, and that they substantially reduce the amount of Teaching Consultant time required to administer the Clinic Process. The implications of these conclusions are discussed in this Chapter. In addition, further suggestions are offered for the implementation of SITAP and changes in the Teaching Consultant role; the constraints acting upon such services in the field of instructional improvement in higher education are also explored. To begin this discussion, a summary of relevant findings is provided below. Following this summary is a discussion of the limitations of the study.

Summary of Findings

Instructors at the high school, community college, and four-year college levels generally found the self-instructional approach to teaching analysis useful and worthwhile. Some preferred it to similar approaches utilizing the services of a teaching improvement specialist.

The Self-Instructional Teaching Analysis Program was perceived by most as a well-organized, complete approach to self-analysis.

However, some deficiencies were noted in the design of data analysis forms and the complexity of data analysis tasks. "Module One: Data Collection" did not present many difficulties for the participants, with the exception of one instructor who could not obtain videotape equipment from his department. Performance of data collection activities generally posed no problems.

Materials in the second SITAP Module were found to need revision. Some participants experienced difficulties with virtually all forms and transparencies provided for use during data analysis activities. In addition, some tasks, notably the Analysis of Predictions, Self-Assessment II, and TABS analysis were seen as redundant, overly complex, and excessively time-consuming. However, as previously stated, the participants were able to circumvent the difficulties with the materials and attain the desired outcome, which they perceived as valuable.

The difficulties and complexity associated with Module Two activities led some participants to omit those activities. The omission of tasks in Module One was justified by a number of statements, including the perception that those activities would not be valuable, lack of time, or lack of resources.

The major strengths of the SITAP materials were two: the self-exploratory nature of the program, and its facilitation of the development of a profile of specific and manageable strengths and areas needing improvement. The major weaknesses were those mentioned above, relating to the complexity and sheer quantity of data analysis forms and procedures.

The results of this study indicate that a 75% reduction in Teaching Consultant time is achieved through the use of SITAP. The time saved by the Teaching Consultant must, however, be expended by the SITAP user. Most faculty felt that, with reservations regarding the (apparently) needless complexity of the tasks and forms, the benefits of the program justified the time devoted to its completion.

Finally, the results of the researcher's attempt to identify a random study sample and the feelings of the participants that faculty may need an incentive to undertake professional development activities suggest that faculty are not generally intrinsically motivated to examine their teaching performance to the degree of depth required in the SITAP materials. This conclusion represents the major constraint affecting the results of this study, as those participating in the project did so from the perspective that teaching is their primary professional activity, and that analysis of one's performance is a major professional responsibility.

Limitations of the Study

Although SITAP has been shown in this study to be a useful method by which faculty may assess their own teaching strengths and weaknesses, and that the self-instructional approach is considered useful, there are a number of conclusions that may not be drawn from these results. First, the use of SITAP does not facilitate the improvement of teaching performance. Improvement activities are intended to follow the completion of the Teaching performance Profile, based on the statements of the data sources consulted. Second, the results

of this study imply that a self-instructional application of the improvement strategy stages of the Clinic Process may prove useful, but this conclusion is not sufficiently supported by this study to merit a recommendation of the development and/or implementation of such materials.

An important element in the Clinic Process, mentioned in Chapter I, is the trusting relationship that is built between the Clinic Process client and the Teaching Consultant. The relationship between the researcher and each SITAP user did not reach the depth achieved during the Clinic Process stages, which may account for the absence of motivation on the part of some participants to complete the program or work at the tasks on a regular basis. If there were more contact with the Teaching Consultant, perhaps during the initial meeting, to discuss perceptions of teaching and issues related to teaching analysis, this deficiency might have been overcome. The expected effects on the motivation and spirit of the participants were apparent, but the level of services was not impaired as evidenced by the determination of teaching strengths and weaknesses and the participants' general satisfaction with the experience. The absence of this relationship could, however, have negative effects on the program outcomes for faculty not attracted by the approach.

Certain characteristics of the sample members and the method of sample identification limit the researcher's ability to generalize from these findings. Seven college instructors do not represent the diversity of styles, preferences and instructional techniques that exist in the population of American college teachers. However, the judge-

ments and conclusions made in this chapter are generalizable to those instructors who are interested in teaching improvement, and self-instructional approaches to teaching analysis. Seven high school teachers, again, do not represent sufficient diversity. An example of this lack of diversity is the extent of teaching experience among the high school teachers--all but two were "veteran" teachers, with 10 to 20 years experience. The inclusion of high school teachers in the sample introduces a number of factors specific to the secondary school situation, such as mandatory supervision, age of students, size of classes and teaching load and responsibilities. The high school teachers were also provided with more structure than the college teachers, as SITAP was for them an optional course activity.

In addition, the voluntary nature of the program affected the extent to which these results may be generalized. Even were the sample members chosen at random, the choice of participation would have been with the instructor. It is suggested that the sample would still have been composed of individuals with an interest in teaching improvement and self-instructional activities. The fact that the sample members were interested in such activities limits these findings. Were participation in teaching improvement activities mandated by the institution, a more representative sample may have been identified.

Other limitations that should be mentioned are represented by the SITAP manual itself. The materials and components have not been validated, with the exception of the TABS questionnaire. Therefore, the inadequacies and exploratory nature of the program presented the

possibility from the start that faculty might reach a certain point and be unable to proceed to finish the program. This was considered unlikely, as the program is modeled after a proven service. However, the specific self-instructional protocols were not sufficiently validated to remove all doubt.

In Chapter I, the researcher cited a number of constraints affecting the field of instructional improvement in higher education. It is not surprising that some of these constraints were evident in the operation of this project.

The major constraint to this study was the reluctance of faculty to undertake the SITAP program, whatever their reasons. It became clear, as the random sampling procedure was abandoned, that faculty at the University of Massachusetts contacted by the researcher did not regard SITAP as a worthwhile activity compared with their other professional responsibilities. This finding is supported by the experience of the Clinic, which sent recruitment flyers to all University of Massachusetts faculty prior to the start of each semester. Generally, 30 faculty or less responded to those mailings, some with requests for information or services other than the Clinic Process. The implication for this study is that the researcher would have had to contact up to 1,000 faculty to obtain a random sample of 15. The four-year college faculty recruited for this study were known to the researcher or his faculty acquaintances. Their participation was considered likely by reason of their known interest in teaching and teaching improvement. Of the nine community college faculty contacted by the researcher, three agreed to participate in this study. One

community college instructor stated that "we regard ourselves as a teaching institution. They [the University] regard themselves as a research institution." While there may be merit to this statement in terms of institutional missions and goals, Wilkerson's (1977) findings indicate that faculty generally consider teaching to be their primary professional responsibility. Ladd and Lipset (1976) found that 74% of faculty surveyed feel that teaching should be "the main criterion in promotion" (p. 10). The supposition that teaching is given a low priority by University of Massachusetts faculty cannot be made. It is suggested from these findings that, at the University of Massachusetts, a lack of institutional support for instructional excellence discourages faculty from participating in efforts to improve their instructional performance.

Prior to December, 1977, the University of Massachusetts' Amherst campus was the home of two instructional improvement programs--the Clinic to Improve University Teaching and the Center for Instructional Resources and Improvement. The combined staff of these programs numbered 15 at their largest. Service was provided to hundreds of faculty regarding instructional skills development, course design, test construction, and other teaching issues and techniques. The Center for Instructional Resources and Improvement ceased operations on June 30, 1978. The Clinic to Improve University Teaching was discontinued by the W.K. Kellogg Foundation in December, 1977. There is currently no agency on the University of Massachusetts' Amherst campus to which faculty may turn for consultation on teaching methods, course design, or other improvement services. A condition of the final W.K.

Kellogg grant awarded to the Clinic and the Center for Instructional Resources and Improvement was that the Clinic Process become an institutionalized service at the University. This institutionalization lasted six months. The University has clearly stated that its fiscal priorities do not include professional development programs and services for faculty.

The need for extrinsic motivation to participate in teaching improvement and analysis activities, termed "reward structures" or incentives in the faculty development literature, is equally constraining to instructional improvement programs without the power or resources to mandate such rewards. Five colleges participants in the present study noted that the SITAP manual would have been "easier to take" had there been some institutional incentive for participation in such a program. Of the participants who felt no need for such a structure, two mentioned that a limitation of SITAP was the necessity to "convince the subjects that the work is worth it."

These comments suggest another issue to be considered in this discussion--the motivation of faculty who participate in teaching improvement activities. Certainly, all who participate have the opportunity to realize the benefits of whatever approach they choose to utilize. With regard to the present study, a number of motivational factors may be suggested by the instructional situations of the participants. The instructor may wish to "advertise" his or her concern for teaching by utilizing a service that is intended to improve teaching performance, or assess his or her current performance. If the data are highly favorable, a case can effectively be made by the faculty

member that his or her teaching performance is of high quality. Faculty may, of course, be intrinsically motivated by interest in teaching, intrigued by the self-instructional approach, and genuinely desire to improve their teaching performance. The actual reasons for the participation of the study sample are unknown, but do not appear to affect the results of this study. However, the possibilities of "mixed" motivations may present certain difficulties in the implementation of SITAP for non-volunteers, particularly with regard to the omission of activities. Instructors utilizing SITAP to provide supporting evidence for personnel decisions may omit procedures that are not directly associated with the gathering of such data but which are important for a confident understanding of the teaching process.

The most obvious effect of these limitations on the present study was their obstruction of the identification of a random study sample. The issues mentioned above reflect upon the field of Education and the professional nature of instruction in postsecondary institutions. Gaff (1975), Bergquist and Phillips (1977), and others have noted similar constraints acting upon professional development programs in higher education. Gaff notes that, unless the programs and services become institutionalized, faculty development may end up as no more than a passing fad. While the approaches to instructional improvement discussed in this dissertation may evolve into entirely different strategies for facilitating excellence in teaching, the services provided by instructional improvement programs have generally been shown to be valuable to participating faculty. The institutional policies of emphasizing research, service and publication

suggest that an instructional improvement program must seek to effect change at all levels of the institutions in which they function, if only to obtain support for their goals, activities and services.

The factors cited in Chapter I and in the above discussion are known to be present in many higher education institutions in the United States. Those attitudes, policies, and considerations that adversely affect the efforts of instructional improvement programs and faculty concerned about teaching will operate as limitations to any implementation of SITAP. These barriers to instructional improvement constitute the major constraint of this study and to the field of instructional improvement.

Recommendations for Future Research

There are three general areas to which the researcher's recommendations pertain: (1) revisions and refinements of the SITAP program and suggestions for the development of similar materials, (2) alternatives to the individualized application of such materials, and (3) the changes in the role of the Teaching Consultant indicated by the success of the SITAP approach. These recommendations are presented and discussed below.

SITAP Revisions and Refinements. In order for SITAP to be an attractive and useful program for many faculty, two major types of revision are indicated by the results of this study. First, the forms and materials used by the participants must be simplified, and the necessary supporting information provided to indicate the benefits,

rationale and purposes for each activity. Second, the mandatory use of all data sources must be stressed to a greater extent to ensure that faculty consult all available perspectives regarding their teaching performance. In addition, to be a truly individualized service, the option for faculty to request the aid of the Teaching Consultant must be present throughout the materials, rather than at two prespecified points. As Ainsworth (1976) has noted, effective advising is crucial to the success of modular instructional materials.

Revisions currently considered for SITAP include the elimination of the Data Report Transparencies, to create a more "open-ended" data analysis and review process. It was clear from the perceptions of faculty who ignored many of the structured data analysis and review protocols that the outcomes of those procedures could be achieved to a satisfactory extent without the cumbersome and time-consuming transparencies.

It was also clear from the results of this study that faculty are generally familiar with computer output, and have little trouble reading the TABS printout (which was designed to be simple for non-technically oriented faculty to read). Therefore, the explanation of the printout should remain, but in abbreviated form and unaccompanied by the elaborate TABS analysis activity. The TABS Student Data Report Form must be revised or eliminated.

Stressing the value of the observation and videotape is indicated as necessary by the results of this study. That college faculty are relatively unaccustomed to such assessment procedures may deter

them from utilizing those activities unless the benefits are clearly specified and accepted by the faculty member. Again, to be truly individualized, SITAP should include the options to omit particular activities if they are of no interest to the instructor. However, those decisions should be based on an awareness of the benefits and liabilities of the activities, rather than vague uneasiness and prejudicial judgements.

Although the time saving for instructional improvement staff may be reduced, the finding that faculty utilized the entire semester to accomplish essentially half the Clinic Process indicates that more Teaching Consultant input during the implementation of SITAP may be required, if only to be sure that participants are adhering to a realistic time frame. The specification of a contract between Teaching Consultant and client to indicate the dates for completion of the various activities is recommended, and could be negotiated during the initial meeting with the SITAP user. As a Teaching Consultant with the Clinic, the researcher completed data collection and analysis procedures for some clients in as little as two weeks. The simplification and revision of SITAP indicated by faculty statements regarding their difficulties is suggested to allow faculty to accomplish those tasks in less than 10 to 14 weeks. The introductory sections of SITAP will be revised to indicate that a three to four week period is realistic for the completion of the program.

Generally, although a number of revisions in design, activities, and implementation procedures are needed, SITAP was shown to be an effective service for faculty to identify the major teaching

strengths and weaknesses in their performance. As such, the materials may be implemented as written.

Instructional improvement programs and personnel wishing to develop materials similar or supplementary to SITAP are advised by this writer to examine carefully the experiences the participants in this study considered most useful. The diversity of perspectives sought for the determination of the Teaching Performance Profile, the self-exploratory nature of the program, and the identification of specific and manageable areas of strength and deficiency were perceived as the program's major strengths. Faculty were generally appreciative of the opportunity to examine all data sources in depth to determine not only the general ratings of their performance, but some insight into the reasons for those ratings as well. Those considering the development of self-instructional teaching improvement materials are cautioned to "eschew surplussage" (Twain, in DeVoto, ed., 1968), and to write objectives, design activities, and refine directions and information with the very real time constraints of university faculty in mind. This study has shown that activities perceived as overly complex or cumbersome by their intended users are likely to be omitted for those reasons. If the activities are considered essential, they must be made attractive through the clear specification of outcomes, benefits, and a reasonable time requirement. An omission in the SITAP materials that may account for faculty choosing not to utilize all activities was the clear specification of the benefits to be derived from their use. Such a statement, including a focus on the goals of the program from the user's perspective, may

help motivate faculty to explore unfamiliar techniques and sources of feedback.

Although faculty were able to determine to their personal satisfaction the skills critical to their teaching style and situation and their major strengths and weaknesses, it would be very desirable to have independent validation of these perceptions after completion of the Teaching Performance Profile. During the Clinic Process, the Teaching Consultant assists the faculty member in the validation of judgements regarding strong and weak skill areas, and priorities for improvement work. It may be necessary to build into materials such as SITAP a mechanism whereby the user may validate his or her judgements, or obtain assistance from the instructional improvement staff to discuss the outcomes. Such a validation stage may be missing in self-instructional materials generally. Particularly in the case of such materials for teaching improvement, steps must be taken to insure that decisions are based on valid statements from all data sources, and represent the areas for improvement that will suggest change strategies of most benefit to the user. The researcher suggests that two options are available to provide for the validation of the final SITAP outcomes: a third module designed to guide faculty through self-instructional protocols for validation, or access to personal assistance from the instructional improvement program staff. Such activities would constitute the "post-test" to the SITAP materials in that they would involve the comparison of the user's conclusions and perceptions with those of an outside specialist, or materials designed to function as such a resource.

Finally, the results of this study indicate that perhaps an important outcome of the SITAP materials is not mentioned in the manual. Participants in this study clearly engaged in critical assessment and thought about their teaching performance, which may constitute for some users a more important outcome than the specification of strong and weak skill areas or TABS items. SITAP, and other teaching improvement materials, should clearly state as a major goal and intended outcome the encouragement and facilitation of an on-going, critical examination of one's professional performance from the perspective of improvement and change. It may be that the SITAP user who felt that his or her self-concept had been clarified and, to some extent, modified favorably by the experience is more likely to change his or her teaching behavior then instructors who discovered that they were somewhat weak in clarifying their self concept.

A number of conditions have been mentioned which the researcher suggests should be considered in the development and refinement of materials such as SITAP. That such materials are needed in the field of instructional improvement is evident in the lack of reports of such materials in the literature, apart from those mentioned in Chapter II. That they would be considered useful by instructional improvement program staff is indicated by Centra's (1976) research. That faculty consider them useful has been illustrated by the results of the present study.

Alternative implementation procedures. The SITAP materials were designed for use by individual college faculty, working one-on-one with

a Teaching Consultant for the introduction of the materials, problem solving, and providing closure to the experience. That this application is successful is indicated by the feelings of the college participants in this study that the approach was useful, and required minimal contact with the Teaching Consultant to accomplish the stated outcomes of the program. In addition, the success of the group application with the high school participants suggests that such an application is also useful, and further reduces the amount of time required of the Teaching Consultant.

It is recommended that such a group application be considered for college faculty. Group meetings to accomplish the three major Teaching Consultant tasks of introducing, facilitating the use of, and providing closure to the program will not compromise the self-instructional nature of the materials. These meetings provide the added benefits of all participants learning from the questions and concerns of others, and the provision of opportunities for colleaguial interaction which may result in choices for observers, videotape analysts, and other roles that the materials require be filled by persons normally outside the user's instructional situation. Improvement activities could then be planned either individually or in group settings for those who wish to utilize either approach. Group meetings for the design of improvement strategies could result in productive brainstorming and consultation about particular instructional problems. The professional communication facilitated by such activities could prove to be of further benefit to the institution, through the suggestion of the development of interdisciplinary courses, team teaching, and other

alternative instructional modes by the Teaching Consultant. The opportunity for faculty to realize their similarities and common concerns exists in such activities.

Another alternative application of SITAP should be considered for instructional improvement programs with resources that allow the Clinic Process to be provided in its original form, and where that service is desirable without modification. Such programs need to train Teaching Consultants to administer the Clinic Process. Part of such training should be the implementation of the Process with a faculty client. With certain language revisions, and the corrections previously mentioned, the SITAP manual could constitute an effective training manual for the guided implementation of the specific Clinic Process data collection, analysis and review stages. All necessary forms are provided, and where necessary could be revised for such an application. It is obvious that the issues and interpersonal skills with which teaching consultants must be familiar are not included in the SITAP manual. However, materials developed at the Clinic address such issues and skills, and many sources are available for learning the nature and application of such skills. The manual in this context would be a guide to the stages of the Clinic Process.

Finally, it is certainly possible and recommended that SITAP be implemented as intended. The results of this study show that some college teachers considered the self-instructional approach, and SITAP in particular, a useful way to determine their own teaching strengths and weaknesses. In essence, this is the only application

truly indicated by the results of this study. Further research regarding validation of materials and alternative applications are needed to ensure that the previously recommended applications are appropriate. The discussion of those applications provides areas for further research.

Changes in the role of the Teaching Consultant. There are a number of Teaching Consultant responsibilities that are altered or eliminated by the implementation of SITAP. The most obvious is that the Teaching Consultant is no longer charged with data collection and analysis tasks, or with the extensive record-keeping that accompanies those activities. The Teaching Consultant has always had to convince most of his or her faculty clients of the benefits of the Clinic Process. However, this function is intensified through the use of SITAP. The Teaching Consultant must convince faculty of the merits of the overall Process, and must also allay the fears and reservations of the client regarding the time required to utilize the program, and the presence of others in his or her classes. In addition, the Teaching Consultant must overcome the lack of a deep and trusting relationship when the improvement strategy stage is reached. The ability to enter the process at that point and determine suggestions for improvement will be crucial to the relationship that subsequently developed. If the Teaching Consultant appears to suggest strategies for particular skills from "the top of his or her head," the client may be insulted or refuse to accept those suggestions, even though they may be based on extensive experience. The Consultant is

advised to first obtain the completed Teaching Performance Profile, and consider the total instructional situation, paying particular heed to the skills the instructor indicates as critical to his or her teaching style and situation. Should the Teaching Consultant consider other skills critical, perhaps the best way to approach them is to help the client develop strategies for the skills of particular concern to him or her, and subsequently explain how other skill areas may affect or be affected by related skills. This in no way implies deception or manipulation. Hopefully, the client and Teaching Consultant will have built a fairly good relationship through the implementation procedures of SITAP, on which further work may rely.

Like the instructor implementing individualized instructional activities, the Teaching Consultant using SITAP will become a facilitator of teaching assessment procedures, rather than a "dispenser of analyses." That the Teaching Consultant is in an instructional role is clear. That this role will change as a result of the individualization of the development of the Teaching Performance Profile is indicated by the increase in client (learner?) autonomy in the teaching improvement process.

Two college participants in the present study felt that the self-analysis approach was more suitable to their style of interaction than a similar service provided by a consultant. To individuals who express this feeling, the Teaching Consultant will truly be a facilitator, enabling the clients to determine appropriate measures necessary to achieve personally relevant goals and objectives for improving their instructional performance. The Teaching Consultant must be willing to

relinquish control over the specification of areas for improvement and the design of learning activities. It is expected that such changes will not be very difficult for individuals trained to examine the professional performance of faculty, although skill in examining instructional performance does not necessarily indicate the willingness to allow the direction and activities to be assumed by the client. It is hoped that Teaching Consultants will find these accommodations easy and beneficial to themselves and their clients.

An obvious benefit of SITAP's success is the concentration of Teaching Consultant time in the improvement strategy functions of the Clinic Process. The Teaching Consultant will truly be an improvement specialist, rather than a collector and analyzer of data. The entrance of the Teaching Consultant at the improvement strategy stage will emphasize the importance of the improvement work, and the consultative nature of the relationship.

A less favorable responsibility evolving upon the Teaching Consultant in utilizing SITAP is the necessity to remind faculty that tasks must be accomplished by a specified time, which may allow a week's delay from the original agreement. It has been stated that a contract between Teaching Consultant and client is considered advisable. The requirement that faculty adhere to specified (albeit general) time frames creates the unattractive necessity that Teaching Consultants remind their less energetic clients of their original agreements. This may be perceived by the client as "nagging," and hinder the formation of a productive working relationship. It may also cause resentment, which may be expressed by a further lag in the accomplishment of

activities. For these reasons, the benefits of the program must be clear to faculty in such a way that the outcomes are genuinely desired, and faculty are (to the extent permitted by institutional constraints) intrinsically motivated to complete the program. Emphasizing the benefits of the improvement strategy stage of the Process may assist in providing extrinsic motivation.

With regard to faculty motivation for in-service professional development activities, Stephens and Scott (1977) have noted that faculty are "motivated" to engage in in-service activities through self-analysis and personal goal setting (p. 3). Allowing faculty to determine the skill areas that will form the focus of their improvement efforts and the opportunity to analyze their own performance and progress should provide a measure of intrinsic motivation. The Teaching Consultant utilizing SITAP is advised to provide for his or her clients self-determination of development areas and activities.

Reflections

In considering the results of this study, and the personal experiences associated with the researcher's interactions with the study participants, a number of personal conclusions which are only by inference supported by the results of this study. First, the college participants attempted to use the initial meeting to discuss their teaching experiences, successes and failures, with the researcher. In no case were these discussions curtailed out of fear of jeopardizing the self-instructional nature of the program. However, there discussions reinforced the researcher's fear that the "cognitive

dissonance" resulting from the discrepancy between real and imagined performance would seriously damage one or more participants' self-concept, and render them ineffective, to some extent, as instructors. It was feared that such an experience would create needless uncertainty regarding an individual's own competence. Such outcomes have been documented during self-viewing activities on videotape by Fuller and Manning (1973). It was fortunate that all the participants in this study were considered very good or excellent teachers by their students, observers, and, in some cases, colleagues. Hence, the only dissonance that occurred in this study was the participants' perceptions that they were not performing as well as they actually were shown to be by the statements of the data sources. The possibility of negative outcomes in this regard was a constant worry to the researcher. Teaching Consultants utilizing the SITAP manual are encouraged to exercise caution and judgement regarding the learning styles of the individuals for whom they intend to implement SITAP or related programs. It is certain that, in cases where negative outcomes could immobilize the unsupervised process client, the Provision of the Clinic Process in its original form is well worth the additional expenditure of time. In essence, SITAP is not appropriate for all faculty. The judgements of the Teaching Consultant and client should be considered in light of these factors before the program is utilized.

The above considerations open the question of the appropriate use of self-instructional materials. There are conditions under which it may be inadvisable to allow faculty to analyze their own teaching

performance without the mediating influence of a specialist who can lend his or her perspective to negative results. As is mentioned above, some individuals may be overwhelmed, even immobilized by negative feedback, particularly if such results are in sharp contrast to their self-perceptions. It is appropriate that the faculty members have the option to seek consultation with a Consultant as needed and desired.

In the researcher's opinion, SITAP and similar materials will find their best application with those faculty who are interested in teaching, and who are aware that the performance of instruction is complex, and that excellence is gradually achieved through study and practice. That these materials should be an optional approach to teaching analysis, however, cannot be overemphasized.

Weldon (1975) notes two possible applications of existing self-instructional modules. They may be used as "flagship" or introductory modules for a series of units developed by an instructor to suit his or her particular needs of the educational activities for which they are implemented. Both applications are suggested for SITAP. Individuals considering the application of SITAP are advised to assess their clients' needs, and delete or add activities according to those needs. In addition, the manual may serve some programs most efficiently as an introductory activity to further instructional, organizational, or faculty development activities.

It is difficult to maintain the appropriate degree of detach-

ment in considering the unsuccessful attempts to select a random sample for this study. Heard often by the researcher during this study was the statement that some sort of inducement for faculty to undertake improvement activities is required. This was not new information, as Gaff, the Group of Human Development, Bergquist and Phillips, and many others have cited the same constraint. What is disturbing, however, is that the researcher heard almost as often that "students aren't motivated to learn." The implication is that students should not need extrinsic motivational factors to achieve mastery of the content under consideration, but faculty do need extrinsic motivation to participate in activities that will enable them to master, to some extent, the skills of their chosen profession.

Summary

The results of this study showed that a self-analysis of teaching performance using programmed materials to facilitate the collection, analysis and interpretation of data is considered a useful activity for teaching assessment by college and high school teachers interested in determining their teaching strengths and areas needing improvement. Further support for the Clinic Process as an in-service training activity is provided by the satisfaction of the participants with the variety of perspectives sought for the determination of the Teaching Performance Profile, and the general satisfaction of the college teachers with the TABS questionnaire.

Also indicated was the need to revise and restructure some SITAP activities prior to future applications. Alternative implemen-

tation procedures were discussed, as well as the changing role of the Teaching Consultant, constraints operating in the field of higher education that affect instructional improvement efforts, and the reflections and observations of the researcher.

Faculty have been shown to agree with instructional improvement program directors in that a system by which they may determine their own teaching strengths and weaknesses is perceived as useful. In addition, the individualization of the prioritization and improvement of teaching skills has been achieved through the self-exploratory nature of the SITAP materials.

Faculty satisfaction and the improved cost-effectiveness of the Clinic Teaching Improvement Process are indicated by the results of this study, and suggest that a self-instructional application of the data collection and analysis stages of the Clinic Process is a useful service, and will make the Clinic Process available to instructional improvement programs with limited resources.

Finally, the hypotheses of major concern to this study have been shown to be accurate. Faculty interested in determining their instructional strengths and weaknesses perceive a self-analysis of teaching as a useful activity. The time required of the Teaching Consultant to administer the data collection and analysis stages of the Clinic Process was substantially reduced. Faculty did become aware of alternative assessment procedures, and discovered the nature of a range of teaching skills and behaviors.

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Appendix A

The Self-Instructional Teaching Analysis Program

SELF-INSTRUCTIONAL TEACHING ANALYSIS PROGRAM

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SELF-INSTRUCTIONAL TEACHING ANALYSIS PROGRAM

The major purpose of this program is to provide instruction in the administration, analysis and interperetation of data collection procedures and instruments. Certain benefits may be realized by an instructor utilizing this program.

Through learning to use the data collection and analysis procedures in the program, it is hoped that some of the reluctance around "teaching evaluation" will be lessened. This is not an evaluation program. It is intended to provide information that may be used by the instructor toward the development and/or improvement of teaching skills.

Another outcome of this program will be familiarity with the data collection procedures which may then be used independently and continually to monitor one's teaching performance. Teaching improvement staff are involved in the program only to provide computer and other equipment services or in the event a problem arises with the materials.

A third, more obvious outcome of the program is that the completion of all activities in this manual will provide the instructor with a comprehensive profile of his or her teaching strengths and areas needing improvement. The variety of perspectives sought and consulted to provide feedback on the performance of teaching skills presents a profile not available in traditional evaluation procedures, and which will serve as a strong base for improvement activities.

This program is self-paced. As such, the time requirement is extremely flexible in terms of the pace at which activities are undertaken. Among the optional time considerations are the length of time required for preparation, time devoted to solving problems, and the time available to the instructor to work on the activities on a day-to-day basis.

Some general guidelines may be provided. The entire program could be completed in four to six weeks. It is assumed that most instructors will not have the kind of time this would require, so the expected duration of the program is eight to twelve weeks. The time requirements for each activity in each module are provided in appendix D. It is conceiveable that for one or two hours per week, you could accomplish the in-depth analysis of your use of the skills which form the focus of this program.

To complete the activities in each module, you will need a variety of materials, most of which may be found in the pockets of this manual. Materials for Module One are in the front pocket, those for Module Two in the rear pocket. Please see the specific activities for detailed lists of the materials required.

Thank you for your interest in the Self-Instructional Teaching Analysis Program.

TABLE OF CONTENTS

INTRODUCTION

This manual contains a self-paced program that is intended use by instructors who wish to examine their use of some specific skills of teaching. The information and resources in this manual will enable you to collect and analyze information about your teaching from four major sources; your experience as a teacher, your students' perceptions of your teaching, a videotaped sample of your teaching performance, and the perceptions of an observer.

The purpose of these activities is to provide you with information you may use to improve your teaching. These materials alone will not improve your use of teaching skills. Rather, they will assist you in obtaining information that will enable you to systematically identify the teaching skills you consider most critical to your teaching style and situation, and which skills you perform best and less well. This information will serve as the basis for any improvement activities you undertake by providing a clear profile of your strong and weak skill areas. Hopefully, you will use this information to design and implement improvement activities.

This program is divided into three sections. The first contains the introduction and background of the program. The second and third are activity "modules". The modules contain specific procedures, directions and resources to be used in a systematic approach to the identification of teaching strengths and areas needing improvement. The activities are based on the Teaching Improvement Process developed at the Clinic to Improve University Teaching at the University of Massachusetts.

This program differs from the Clinic's Process primarily in the role of the Teaching Consultant. In the Clinic Process, the Teaching Consultant is responsible for data collection and analysis, and the instructor examines the data before entering the data review meeting. At that meeting, improvement activities are planned. In this program, the Teaching Consultant enters only in the event of a question or problem, and at the end of the program if follow-up services are desired. This program allows you to perform an in-depth analysis of your teaching without the intervention of any individual except the person you designate as your classroom observer. You are asked to perform the very difficult task of objectively analyzing your own teaching performance based on the collection of data from the sources previously mentioned.

The two activity modules of this program are "Module One: Data Collection" and "Module Two: Data Analysis and Review". The first module provides directions and information to facilitate the collection of data from the four data sources. The second module includes a number of procedures for tabulating, analyzing and reviewing the information derived from the activities in Module One. It also provides a format for composing a "Teaching Performance Profile" which organizes the various skills and items into critical skills, and strong and weak skills.

When you have completed the second module, you will have a clear statement of your instructional strengths and weaknesses, and skills important to your teaching style and educational environment. At that time, you are asked to complete and send a form indicating that you have finished the program, and whether you wish to pursue follow-up activities.

Since this is a reuseable manual, copies of all forms and note sheets are provided. Please do not write in the manual.

TEACHING SKILLS AND BEHAVIORS

This program is an approach to the identification of teaching strengths and weaknesses through a focus on specific teaching skills and behaviors.* The Clinic Process, on which this program is based, grew from a teacher training technique known as Microteaching. Developed at Stanford University, Microteaching originated as a pre-service training procedure for prospective elementary and secondary school teachers. It has since been widely accepted as an in-service improvement activity at the university level

The skills which form the focus of this program have been gleaned from educational research, including the Microteaching literature, and the experience of the Clinic staff. While the comparative data available do not suggest that one teaching method is superior to another, correlations have been found to exist between certain skills of teaching and student achievement and attitudinal change. Studies that support these relationships include Allen and Ryan (1969), Brophy and Evertson (1974), Gage (1975), Hildebrand, Wilson and Dienst (1971) and Furst (1973).

Although this program emphasizes twenty specific teaching skills, it is acknowledged that there are many other factors influencing the teaching-learning situation such as differing student learning styles, the physical environment, institutional and departmental variables, and the knowledge and motivation the students' posess upon entering a course. The instructor rarely has control over these variables.

While this program assumes that these twenty skills are important, the list is not complete. It is not assumed that all major instructional skills are represented, nor is it expected that an instructor who acquires and perfects all of these skills will be an "effective" teacher.

These skills represent a starting point for instructors who wish to examine their teaching performance, perhaps in order to enhance their instructional effectiveness. In order to facilitate this activity, the Self-Instructional Teaching Analysis Program provides an approach to examining one's teaching performance which will serve as a strong foundation for the improvement of the instructor's use of these skills.

This approach is flexible. Results from any data source may be disregarded if they are felt to be not applicable to the instructor's teaching style or situation. Not all of the skills will be appropriate to every instructional situation. For example, if students indicate that an instructor is weak in facilitating student participation, that information may not be considered in depth if the course is attended by 300 students in an auditorium. However, it may indicate that the students desire a greater degree of involvement in their learning experience. In this case, the instructor can make alternate arrangements, such as instituting discussion sessions led by the better students.

There is support for the skills which form the focus of this program. It is hoped that this self-instructional approach will prove valuable in assisting you to discover your strong and less strong teaching characteristics.

* Skills are listed in Appendix A.

Self-Instructional Teaching Analysis Program

MODULE ONE: DATA COLLECTION

MODULE ONE: DATA COLLECTION

DESCRIPTION

This module contains five activities that are designed to enable you to collect data from the four sources to be consulted during this program. The first activity of this module allows you to record your feelings about what you do well, and the aspects of your teaching you feel could be improved. You will also examine the instructional techniques you prefer, and how well they are working to help you achieve your goals.

The second activity involves your completion of the Self-Assessment Data Report Transparency. The information you record on this form will become part of the TABS data, and will appear on the computer printout. The third activity is the administration of the Teaching Analysis by Students to your class. The TABS questionnaire (See Appendix B) asks students to respond to thirty eight items related to the twenty teaching skills and behaviors briefly explained in Appendix A. The developers of the TABS relied on the results of educational research and the experience of the Clinic staff to identify skills contributing to teaching effectiveness.

While the students are completing the TABS, you will complete the "Predictions of Student Response on TABS". This will indicate the actual numbers of students you believe will respond in each category for each item.

The fourth activity of this module involves videotaping a typical class in your course. Videotape is preferred,as it provides visual examples of behavior and has the advantage of showing students' activities as well as the instructor's. If videotape is not available, audiotape may be substituted. The intent is to obtain a sample of your teaching which may be analyzed, referred to repeatedly, and which may provide supporting evidence for the statements of other data sources.

The final data source to be consulted is an observer not directly involved in the course. You will select an individual to observe one or more classes, using the forms and directions provided for that person in the front pocket of the manual. The observer need not be a teacher or involved in any way with teaching improvement. You may select a student, friend, or other person not enrolled in the course - anyone you wish. You will meet with your observer before and after the observation(s). They will provide you with written feedback on the events they observe. You will keep this written information and any notes you take during your meetings for use in the activities of Module Two.

Upon completion of this module, you should accomplish the tasks listed on the following page labelled OBJECTIVES.

Module One: Data Collection

OBJECTIVES

The following statements reflect the expected outcomes of the activities in this module.

1. To collect information about your teaching performance from the four data sources previously identified
2. To become familiar with the data collection procedures contained in this program
3. To complete all data collection activities by the sixth week of the semester*

* This is provided as a suggested time. As this program is self-paced, there is no requirement to finish at the sixth week. However, it is felt that this is a reasonable time period. It is acceptable to finish this module before or after that time.

Module One: Data Collection

ACTIVITY ONE: PRELIMINARY CONSIDERATIONS

OBJECTIVES

The objective of this activity is to help you clarify your goals, and examine your present teaching methods in relation to your goals. You will also consider the relative merit of those methods and your expertise in their use.

MATERIALS REQUIRED

For this activity you will need the "Preliminary Considerations" question and response form, located in the front pocket of the manual.

DIRECTIONS

1. Read through the list of "Teaching Skills and Behaviors: Definitions and TABS Items" (Appendix A) for a basic understanding of the teaching skills addressed by this and subsequent activities. If you feel you would like further explanation of some or all of the skills, contact the Teaching Consultant for expanded skill definitions.

2. After examining the definitions, begin to answer the questions on the response sheet.

3. When you have answered all questions, proceed to the second activity, the TABS Self-Assessment.

Module One: Data Collection

Activity One: Preliminary Considerations

LIST OF QUESTIONS

1. Write the title of the course you have designated for the activities in this manual.
2. What are the stated goals of the course?
3. Are there any goals you have difficulty accepting? (Departmental, institutional goals)
4. What are the specific abilities and/or knowledge the students should be able to exhibit upon completion of the course? (Objectives)
5. How do you measure student achievement? (tests, papers, etc.)
6. What major instructional formats do you use? (Lecture, discussion, etc
7. What other formats have or do you you use occasionally?
8. How well are the present formats working? (Are students achieving the objectives you specified in question three?)
9. What do you consider your three most significant teaching strengths?
10. What are the three most significant aspects of your teaching you feel could be improved?
11. List three skills or activities you think it is possible to change at this point.
12. List three skills or activities you feel cannot be changed at this point.
13. How would you describe your teaching style?
14. What is your opinion of the notion that different people may learn most effectively in different ways?

Module One: Data Collection

ACTIVITY TWO: TABS SELF-ASSESSMENT

OBJECTIVES

There are two objectives for this activity. The first is that by completing the TABS Self-Assessment you will familiarize yourself with the instrument before administering it to your students. The second is that you rate yourself on each of the thirty eight items found in the TABS. The intent is to provide comparative information which will indicate the extent to which your self-rating agrees or disagrees with your students' ratings.

MATERIALS REQUIRED

The following materials are needed to complete this activity:

1. A copy of the TABS instrument (Appendix B).
2. The Data Report Transparency found in the front pocket of this manual.
3. A colored pen to complete the transparency, provided in the front pocket of the manual.

DIRECTIONS

1. Examine the TABS instrument. Read the directions on the first page which begin with "Section I: Teaching Skills and Behaviors". Familiarize yourself with the response categories.
2. Remove the Data Report Transparency from the front pocket of the manual. Circle "SELF-ASSESSMENT" at the top of the transparency.
3. Complete the Self-Assessment by placing a small mark in the desired response category above each item number. If you feel a particular item is "Not a Necessary Skill or Behavior for this course", place a mark in the column labelled "5" below the item number.
4. Replace the completed Self-Assessment in the front pocket of the manual, after connecting the marks to form a graph of your self-assessment.

Module One: Data Collection

ACTIVITY THREE: COLLECTING STUDENT DATA

OBJECTIVES

This activity is intended to assist you to administer the TABS questionnaire to your students, and complete the Predictions of Student Response.

MATERIALS REQUIRED

You will need the following materials to complete the activity:

1. Sufficient questionnaires, answer sheets and number 2 pencils for your students. These are to be obtained from the Teaching Consultant.

2. A copy of the TABS Predictions of Student Response, which may be found in the front pocket of the manual.

3. The directions for administering the TABS on page 9.

DIRECTIONS

1. Obtain from the Teaching Consultant sufficient copies of the TABS questionnaire, student response sheets and number two pencils for your class.

2. Administer the TABS to your class, following the directions on page 9.

3. While the class is completing the TABS, fill out the Predictions of Student Response. Be sure to count the number of students ACTUALLY COMPLETING THE TABS.

4. When you have the completed student answer sheets and predictions, contact the Teaching Consultant, who will have the data computer scored. Include the Self-Assessment Data Report Transparency in the materials you give the Teaching Consultant, so that information may be included on the printout. This is also a good time to return the TABS questionnaires and pencils.

DIRECTIONS FOR ADMINISTERING THE TABS

A. Prior to class, be sure you have enough copies of the questionnaire and answer sheet for each of your students, as well as the Predictions of Student Response form. Be sure to bring the number two pencils. The computer will not read the optical scanning sheets if they are completed with any other writing instrument.

B. During class:

1. Briefly explain to the students your purpose in administering the questionnaire. Mention that you have decided to investigate your teaching style and methods, and that your use of this instrument does not mean you have been identified as a poor teacher. State that the purpose of the TABS is to give you information that will help you improve your teaching, and state that it is not a University evaluation form.

2. Hand out the answer sheets. Ask the students to complete the INSTRUCTOR'S NAME and DATE. On the date, ask them to darken the appropriate box for each number.

3. Ask the students to write their MOTHER'S MAIDEN NAME in the appropriate space,one letter to a box. When the laughter subsides, explain that this is to insure anonymity and protect the respondent.

4. Ask the students to blacken the appropriate box under each letter.

5. Hand out the questionnaire, asking students to begin after you have read the directions aloud.

6. Read the directions to the class on the inside front cover of the TABS booklet. Begin at "Section I: Teaching Skills and Behaviors" and end at "...determine all the responses".

7. When the students have completed the questionnaire, collect the answer sheets, TABS booklets and pencils.

8. Contact the Teaching Consultant, who will arrange for computer scoring of the TABS.

FILL OUT THE PREDICTIONS OF STUDENT RESPONSE WHILE THE STUDENTS ARE COMPLETING THE TABS.

Instructor's Name_____ DATE_____

Number of students completing TABS (please count)_____

As you read each of the first 38 TABS items, carefully estimate the number of students who will respond in each of the categories. Then WRITE IN THE NUMBER of predicted responses in the appropriate column for each item. Note that the first column combines responses 1 and 2. Responses 3 and 4 are combined in the second column and the third column is for response category 5.

	(1) No improvement needed, or (2) Little Improvement needed	(3) Improvement needed, or (4) considerable improvement needed	(5) Not a necessary skill or behavior
	(1 or 2)	(3 or 4)	(5)
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
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27			
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35.			
36.			
37.			
38.			

Module One: Data Collection

ACTIVITY FOUR: COLLECTING VIDEOTAPED DATA

OBJECTIVE

The purpose of this activity is to assist you in arranging for a videotaped sample of your teaching performance. It is preferable to use videotape. However, audiotape will suffice if videotape is not available.

MATERIALS/RESOURCES REQUIRED

You will need the following for this activity:

1. Videotape recorder
2. Blank 30 minute videotape
3. A technician to run the equipment during class
4. The instructions on the following page; a copy is provided in the front pocket of the manual for the technician.

DIRECTIONS

I. Videotape

1. Before the tape is made, fill out the "Pre-Videotape information form". This is done to provide a record of your class plan for referral during your analysis of the tape in Module Two.
2. Contact your department or school for a videotape recorder and technician. If no technician is available, identify a student in your class who can run the equipment.
3. Provide the instructions in the front pocket of the manual to the technician.

II. Audiotape

1. If videotape is not available, obtain a cassette recorder from your department, school, or the campus Audio-Visual Center.
2. If someone is available to run the equipment for you, provide the directions for taping.
3. If no operator is available, simply tape the entire class. When you listen to the tape you can select portions corresponding to the times suggested in the directions. Of course, if you must tape the entire class you will need a cassette of sufficient duration.

Self-Instructional Teaching Analysis Program

DIRECTIONS FOR TAPING

1. Tape the first five to ten minutes of the class period. This is done to insure that you have a sample of your introductory activities.

2. Tape a fifteen minute segment during the class. This should provide a representative sample of your general instructional mode. Remember that you must analyze the amount of tape you get, so resist the temptation to tape more.

3. Tape the last ten minutes of the class to obtain a sample of your end-of-class activities. SIGNAL THE OPERATOR WHEN TEN MINUTES ARE LEFT.

4. Be sure to include the students on the tape. Try to get their reactions to classroom events. Use the zoom capabilities of the lens to obtain the following shots:

   a. The instructor, close and distant

   b. Pan (move the camera side-to-side) the entire class

   c. Zoom back to include the instructor and nearby students

   d. Pan the students at 2-3 minute intervals

PRE-VIDEOTAPE INFORMATION FORM

Course_____ Date_____

1. Generally, what do you hope students will get out of this particular class?

2. How will the class be conducted so the students will acheive those goals?

3. How will you decide whether you have been successful?

4. What have students been asked to do to prepare for this particular class?

5. What do you expect students to be doing during the class?

6. What was done in earlier classes to lead up to this one?

Module One: Data Collection

ACTIVITY FIVE: COLLECTING OBSERVATIONAL DATA

OBJECTIVE

Using the directions and instruments provided for this exercise, you will obtain from your classroom observer his or her perceptions of your teaching performance. The purpose of this activity is to provide you with another perspective of the events in your class.

MATERIALS/RESOURCES REQUIRED

For this exercise, you will need to designate a person to act as an observer in your class. In addition, you will need the "Suggestions for Classroom Observation", Observation Instrument and Directions for Use, and a Data Report Transparency. Copies of these forms for the observer are provided in the front pocket of the manual.

DIRECTIONS

1. Choose an individual to act as an observer in your class. The observer may be anyone you choose. The class periods to be observed should be representative of your usual style and activities.

2. Become familiar with the instruments and directions on the following pages.

3. Arrange a meeting with your observer shortly before the class to be observed. When you meet, provide the observer with the forms and directions for this activity.

4. The pre-class meeting should take half an hour. Complete the "Pre-Observation Information Form" during this meeting.

5. Proceed to the class you have designated for this activity.

6. If you feel the students will react to the presence of the observer, introduce him/her. You might say that s/he is present to help you look at your teaching, just as the students helped you by completing the TABS.

7. Meet after class to discuss the observer's impressions. Obtain his/her notes and Observation Form. Obtain as well the "Pre-Observation Information Form".

8. At the end of the discussion, provide the observer with the Data Report Transparency. Ask him or her to complete the TABS using the transparency as the response form. When the observer has completed the TABS, replace all forms in the front pocket of the manual.

PRE-OBSERVATION INFORMATION FORM

Course_____ Date_____

1. Generally, what do you hope students will get out of this particular class?

2. How will the class be conducted so that students will acheive those goals?

3. How will you decide whether you have been successful?

4. What have students been asked to do to prepare for this particular class?

5. What do you expect students to be doing during the class?

6. What was done in earlier classes to lead up to this one?

Self-Instructional Teaching Analysis Program

DIRECTIONS FOR USING THE OBSERVATION FORM

This form was designed to include some of the more directly observable teaching skills and behaviors of those described in Appendix A of this manual. A number of activities are listed on the left side of the observation form. To the right of each item is a blank space in which should be written your impressions of the instructor's performance of these activities. Please refer to the Suggestions for Classroom Observation,, below. As often as possible, you should try to describe the actual behavior of the instructor or students. For example, writing "The instructor asked four thought-provoking questions in the first half-hour" is preferable to "The instructor makes the students think about the topic". However, both statements could be included, as the first statement supports the general second statement.

The observation form is divided into three sections. The first section contains items that relate to the beginning and end of class. Again, try to describe the behavior as well as the presence or absence of these activities.

The third section asks two questions about the instructor's and students' general behavior. It is very important here to state specific actions that support your general perceptions.

SUGGESTIONS FOR CLASSROOM OBSERVATION *

There are a number of techniques used to observe teaching in the classroom. The approach used for this program involves writing your general impressions together with specific examples of student or teacher behavior and statements to support your impressions. The following suggestions will assist you in this task.

1. Be specific - statements like "The class was interesting" or "the first ten minutes were boring" give the instructor no idea why they are true.

2. Remember that the instructor will receive your completed observation form. Try to maintain a style that is easily understood.

3. If you wish to record anything not addressed by the form, use the "Other Skills" section or the back of the form.

4. Record verbatim as much as possible of what is said and done. Include notes of the time every 5-10 minutes to provide a context for your comments to the instructor.

5. Choose a position in the class that will not be distracting to the students, and that will provide you with a different viewpoint from that of the instructor.

*Adapted from materials by Mary Deane Sorcinelli, Indiana University NW

SELF-INSTRUCTIONAL TEACHING ANALYSIS PROGRAM

OBSERVATION FORM

ACTIVITY	PRESENCE/ABSENCE AND DESCRIPTION
Beginning and End of Class	
Statement of goals and objectives	
Ability to arouse interest in subject matter	
Effectively introduces the day's material	
Ends class with a summary activity	
Asking Questions	
Responding to questions	
Level of Questions	
General Class Activities	
Organization of presentation or activity	
Provides summary activity for each topic	
Makes clear the distinction between major and minor topics	
Promotes dis-	

ACTIVITY

PRESENCE/ABSENCE AND DESCRIPTION

General Behavior

Students appear interested? Apathetic? What are they doing?

Instructor appears interested?

OTHER SKILLS

Self-Instructional Teaching Analysis Program

Module One: Data Collection

SUMMARY CHECKLIST

You have now completed all data collection activities. Please use the questions below to be sure you have accomplished all necessary tasks.

Have you:

1. Completed all questions on the Preliminary Considerations response form?

2. Completed the TABS Predictions of Student Response?

3. Completed the TABS Self-Assessment Data Report Transparency?

4. Administered the TABS to your class?

5. Had a videotape made of your class?

6. Completed the Pre-Videotape Information Form?

7. Completed the Pre-Observation Information Form?

8. Obtained the observer's notes, completed observation form and Data Report Transparency?

9. Contacted the Teaching Consultant for computer scoring of the TABS?

At this point, you should contact the Teaching Consultant to obtain the computer printout. You should have the printout before beginning Module Two/

You should now have in your posession:

1. The information you wrote in response to the questions on the Preliminary Considerations form (Page 5).

2. The videotape of your class, plus completed Pre-Videotape Information Form (Page 11).

3. The notes and forms from your observer (Page 14).

If you do not have one or more of these items, refer back to the section in which it (they) was to be obtained.

Self-Instructional Teaching Analysis Program

MODULE TWO: DATA ANALYSIS AND REVIEW

DESCRIPTION

In this second module of the Teaching Analysis Program, you will proceed through six activities to analyze and interperet the data you collected in Module One. The six activities are divided into three major sections. These are:

I. Preparing for Data Analysis

In this section you will transfer the results of your collected data to graphs. You will inventory the graphs already completed, and analyze the TABS student responses and the videotape using a data report form (paper), and a transparency, respectively. The transparencies are designed to facilitate comparison of results. You may, if you wish, have an assistant (secretary, student, or other) put the information on the graphs. If you choose to do so, please examine the data as directed at some point before continuing to Data Analysis.

II. Data Analysis

The activities in this section allow you to compare all the data sources and complete a second self-assessment (SAII) on a transparency. This self-assessment will reflect changes in your perception of your use of teaching skills resulting from your examination of the data.

An optional activity in this section calls for the observer to examine all the data and complete a second assessment (Observer II). Like your second self-assessment, this graph will reflect changes in the observer's perception of your use of the skills after examining all the data.

The final activity in this section is the Analysis of Predictions, including the TABS Predictions of Student Response and the answers you wrote to the questions in Preliminary Considerations in Module One. You will then compare your first self-assessment, second self-assessment and predictions to determine the extent to which your original predictions were supported or challenged.

III. Data Review

There are two activities in this section. The first activity involves your identification of the skills you consider most relevant and critical to your teaching style and situation. The second is the formation of the Teaching Performance Profile. This profile will include the skills identified in the first activity, ranked in order of decreasing strength and increasing need for improvement, with supporting evidence. This profile is the final product of the program.

At the end of this module, you will decide whether to continue with strategies for improvement. The form on the last page of the manual gives you an opportunity to indicate your choice of follow-up activities. If no follow-up is desired, the form will indicate to the Teaching Consultant that you have completed this self-instructional program.

Module Two: Data Analysis and Review

OBJECTIVES

The following statements reflect the expected outcomes of the activities in this module.

1. To learn how to analyze the TABS printout
2. To learn how to analyze a videotaped sample of teaching
3. To compare the results of four data sources
4. To integrate that information into a profile of critical skills, and teaching strengths and areas needing improvement.
5. To analyze predictions of data, and compare those predictions to actual data results

The following materials obtained in Module One should be in your posession before beginning the activities in this module:

1. The TABS printout
2. The videotape of your class session
3. The notes, form and graph from your observer
4. The pre-observation information form
5. The Pre-Videotape Information Form
6. The TABS Self-Assessment Data Report Transparency

The following materials are needed for this module, and may be found in the back pocket of the manual:

1. Three Data Report Transparencies
2. One (paper) TABS Student Data Report Form
3. Three colored pens
4. One Data Analysis Log
5. One Analysis of Predictions worksheet
6. One Teaching Performance Profile form

ACTIVITY ONE: TABS STUDENT DATA ANALYSIS

OBJECTIVE

The intent of this activity is to enable you to read and interperet the TABS computer printout in order to discover the feelings of your students in regard to your performance of the skills addressed by the questionnaire.

MATERIALS REQUIRED

You will need the following materials to complete this activity:

1. The TABS printout
2. The TABS Student Data Report Form, in the back pocket of this manual
3. The directions and information on the following pages.

DIRECTIONS

The following procedure has been designed to enable you to construct a visual estimate of student responses. It is not a statistical procedure.

1. Read through the directions for reading the TABS printout on the following pages. (Pages 24-26)
2. Examine the printout as you do so.
3. Find the section of the printout that contains the percentages of students responding in each category.
4. Remove the TABS Student Data Report Form from the back pocket of this manual.
5. To record the responses for each item,
   a. Add the percents of students responding in categories one and two on item one. Place a mark above the dotted line and above the number "1" in the TABS Items (Horizontal) column in that percentage.
   b. Add the percents of students responding in categories three and four on item one. Place a mark in that percentage below the dotted line, above the number "1" in the TABS items column.
   c. Place the number of students responding in category "5" in the "5" column, below the TABS item number.
   d. Connect the two marks above and below the dotted line. The result will be a vertical bar.
   e. Follow this procedure for each TABS item.

SOME NOTES ABOUT TABS ANALYSIS

In this program, data analysis is a rational process rather than a statistical one. Although the data are strong statements about your use of the teaching skills, other factors enter into the teaching-learning situation which should be considered as well. For example, a decision you will make in this module concerns identifying the skills you consider most critical to your teaching performance and instructional environment.

The TABS instrument was designed as a diagnostic tool, to function as part of a teaching improvement process. For this reason, there is no University norm for the TABS to which one may conpare one's students' responses. Skills or items are indicated as strong or needing improvement relative to the overall responses on your particular set of data. Of course, the general statement of the students will be obvious and must be considered. However, the improvement function of the instrument is also a reason why the mean is not presented for each item. There is no standardized cut-off point at which an item or skill is considered strong or weak. For the purposes of the multiple data source approach of this program, the identification of relative strengths and areas needing improvement will provide areas for consideration as starting points for change. If the TABS were the only data source to be considered, perhaps the mean would be provided, and a University norm calculated. Since the TABS is only one source of data, those figures are considered not necessary.

In most cases, it is useful to consider categories one and two and three and four together as "strong" and "weak", respectively. Directions are provided in cases where procedure varies from this designation.

DIRECTIONS FOR READING THE TABS PRINTOUT

I. Predictions of Student Response

The Predictions of Student Response may be found in the first section of the TABS printout. In bar graphs, the T's represent the teacher's predictions and the S's represent the students' responses. The parts of the graph are explained below.

A. The number of students is indicated by the numbers across the top of the graph.

B. The response categories are collapsed into STRONG (1 and 2), WEAK (3 and 4), and NOT NECESSARY (5).*

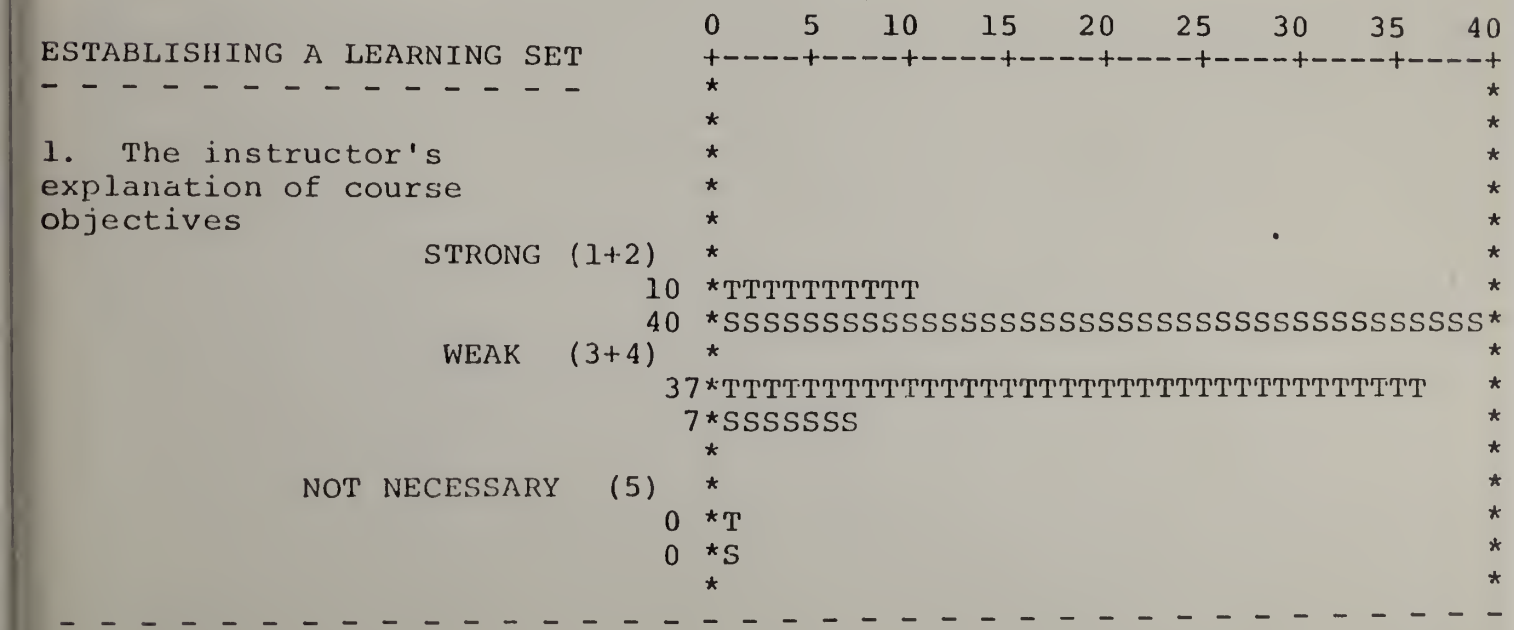
C. The number of students responding in the collapsed categories and the number ofstudents chosen by the teacher in the collapsed categories appear to the left of the T's and S's.

D. The number of T's and S's is NOT equal to the number of responses. T's and S's are printed to reach the frequency indicated at the top of the graph.

* Response categories are as follows: 1 - No Improvement Needed; 2 - Little Improvement Needed; 3 - Improvement is Needed; 4 - Considerable Improvement Needed; and 5 - Not a Necessary Skill or Behavior for This Course

TEACHER PREDICTION/STUDENT RESPONSE COMPARISON

IN BAR GRAPHS, T'S SHOW TEACHER PREDICTIONS, S'S SHOW STUDENT RESPONSES



Following the Predictions section, the TABS items are listed according to increasing accuracy of prediction. The item on which your prediction was most divergent from the students' responses is listed first, the item on which your prediction was most accurate last. You must refer to the Predictions section for the numbers of responses and predictions. This is not reported in this section. This list may not be available on the computer.

II. Percentage of Student Responses and Self-Assessment

This section (labelled "Summary of Section I") presents the number of students selecting each response category for items 1 - 38. It also includes your self-assessment.

A. Titles at the left margin (e.g., "Establishing a Learning Set") indicate the skill area to which the TABS items refer.

B. The whole number is the number of students selecting each response category.

C. Beneath the integer is a decimaled number which represents the percentage of students who answered that item in each response category.

D. The asterisk (*) represents your Self-Assessment.

ESTABLISHING A LEARNING SET	1	2	3	4	5
1. The instructor's explanation of course objectives	14 28.57	28 57.14*	7 14.29	0 0.00	0 0.00
2. The instructor's explanation of objectives for each class session and learning activity	14 28.57	24 48.98	9 18.37*	2 4.08	0 0.00

II. Histograms

A histogram is a graphic representation of the number of responses in each response category for items 1-38.

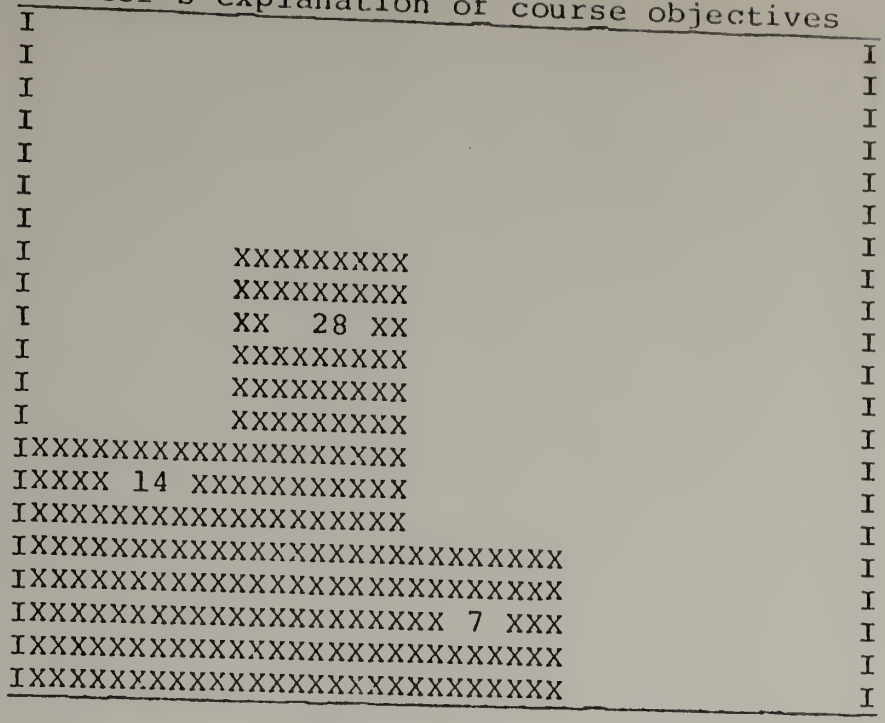
A. The numerical scale on the left side of the histogram represents the number of students in the class.

B. Within each bar appears the number of students selecting that response category.

C. Below the histogram the number of responses (Cell Count) and percentage (percents) of responses are listed for each category.

D. The final line reports the missing responses. Percentages are figured on the number of students actually responding on the item.

1. The instructor's explanation of course objectives



	1	2	3	4	5
Cell Counts	14	28	7	0	0
	28.57	57.14	14.29	0.00	0.00

OUT OF A TOTAL OF 49 STUDENTS, 0 DID NOT RESPOND

IV. General Background Items

In addition to the students' responses on the 38 skill-related items, there are twelve items regarding the students' background, learning style and general interest in the course. The results of those items appear after the Summary of Section I.

ACTIVITY TWO: VIDEOTAPE ANALYSIS

OBJECTIVE

This activity is designed to provide focus and purpose to your viewing of the videotaped sample of your class. It will also direct you in transferring your analysis to a transparency for comparison with other data sources.

MATERIALS REQUIRED

You will need the following to complete this activity:

1. The videotape of your class
2. Equipment with which to view the tape (see directions)
3. A copy of the TABS (Appendix B)
4. A blank transparency from the back pocket of this manual

DIRECTIONS

1. Arrange to view the videotape. If you have difficulty securing equipment and facilities, contact the Teaching Consultant.
2. Bring to the viewing a copy of the TABS, a blank transparency, the Data Analysis Log and the Pre-Videotape Information Form you completed when the tape was made.
3. After viewing the tape once through, write your general impressions in the space provided in the Data Analysis Log. View as much of the tape as you consider necessary.
4. Examine the Pre-Videotape Information Form. Was your performance consistent with your plans? Write your impressions on the Data Analysis Log.
5. View sections of the tape again, stopping to review important events, or when you have seen enough to make the necessary judgements.
6. Complete the TABS as best you can, based on what you observed on the tape. You may refer to the tape. Use a transparency to record your responses. Circle "VIDEO" on the form. Use a different color than in previous activities.
7. If it is possible to get someone else to analyze the tape as well, this is desireable. You can then compare perceptions and decide which rating (or both) to use. Transparencies are provided.
8. Should you prefer not to analyze your own tape, you should still view it. You may have someone else analyze the tape following the above directions.

Module Two: Data Analysis and Review
Section I: Preparing for Data Analysis

CHECKLIST

As results of the activities in this section, you should have the following materials:

1. The TABS Student Data Report Form

2. Your videotape analysis (and/or that of another individual) on a TRANSPARENCY.

You should now locate and prepare the following materials from Module One:

1. Your Self-Assessment Data Report Transparency

2. The Transparency completed by your observer.

If you have all of the above items, you are ready to proceed to section II: Data Analysis. If you do not have one or more of the above items, refer back to the section in which it (they) was to be obtained.

Module Two: Data Analysis and Review
Section II: Data Analysis

ACTIVITY ONE: COMPARISON OF DATA

OBJECTIVE

The purpose of this activity is to assist you in the comparison of results from all the data sources to gain a clear idea of the differences and similarities among them.

MATERIALS REQUIRED

You will need the following to complete these procedures:

1. The TABS Student Data Report form
2. The Observer's TABS Response Transparency
3. The Videotape Transparency
4. The Self-Assessment Transparency
5. The Data Analysis Log

DIRECTIONS

1. Place the Self-Assessment transparency over the TABS Student Data Report form.
2. On the Data Analysis Log, write in the discrepancies between the two assessments in the space provided.
3. Follow this procedure for the following sets of data:
   a. Self-Assessment and Observer's Assessment
   b. Self-Assessment and Videotape Results
   c. Student Responses and Observer's Assessment
   d. Student Responses and Videotape Results.
   e. Observer Comments and Videotape Results

After completing steps one through three, you should have the Data Analysis Log completed except for Section VII - Comparison of all Data Sources. You may continue to manipulate the forms for as long as you wish - place two or three together to view that comparison. As you do so, note any new findings in the space provided in Section VII of the Log.

Module Two: Data Analysis and Review
Section II: Data Analysis

ACTIVITY TWO: ANALYSIS OF PREDICTIONS

OBJECTIVE

This activity will focus on the TABS Predictions of Student Response and the Preliminary Considerations information. At the end of this activity, you will have discovered and interpereted the differences and similarities in your predictions and the students' responses on TABS.

MATERIALS REQUIRED

You will need the following materials to complete this activity:

1. The TABS printout
2. The Directions for Reading the TABS Printout(Pages 24-26)
3. Your completed Preliminary Considerations form
4. The Analysis of Predictions note sheet, in the rear pocket of the manual.

DIRECTIONS

1. Read over the responses you wrote to the questions in Preliminary Considerations and the "Notes about Your Predictions" on the following page.
2. Examine the predictions section of the TABS Printout. On the printout, place a mark to the LEFT of any item or skill on which your prediction disagrees with a statement you made in Preliminary Considerations.
3. Using the same section of the printout, place a mark to the RIGHT of any item or skill on which the students' responses varied significantly from your predictions. Note whether the variation was a student indicated strength or area needing improvement.
4. Write on the Analysis of Predictions note sheet THE ITEMS ON WHICH YOUR PREDICTIONS VARIED FROM THE ACTUAL STUDENT RESPONSES. Note all information from step 3, regarding strength and need for improvement.
5. Consider the items you have written on the note sheet. Do you agree with the students' assessment of your performance of those items? Were you surprised at the results? What are some reasons you can think of for the differences between the students' responses and your rpedictions?
6. Note by placing an asterisk (*) next to the item (on the note sheet) which items you consider most critical to your teaching style and situation.
7. Carefully consider the information analyzed in this activity. Think

over again the reasons for the discrepancies in the data. When you are satisfied that you have a clear picture of the data, proceed to Section III: Data Review.

* It is not expected that your predictions must agree exactly with the students' responses in order to be considered "accurate" predictions. The variation that is acceptable is a matter of judgement, and depends on the number of students and the overall TABS results.

* *

SOME NOTES ABOUT YOUR PREDICTIONS

It may have occurred to you to womder about the title of this activity, as of the instruments to be considered only one is a true prediction of the data. The other data sources have been included in this activity because all were completed prior to your analysis of the data. Now that you know the students' perceptions of your teaching performance, and have seen yourself on the tape and obtained the perceptions of the observer, your opinions of some things may have cnaged.

Your responses in Preliminary Considerations - a self-assessment - represent what you believed to be your "teaching performance profile" when you began this program. Those beliefs may have been modified in terms of their representation of your strengths and areas needing improvement. Indeed, this is one indication that this self-instructional program has been useful. This activity focusses on one perspective of the final data source to be analyzed in this module - you. The Self-Assessment was your statement of your perception of your performance on those specific skills addressed by the TABS instrument. There is much more to the teaching-learning situation than is addressed by the TABS. Hence, your responses on the Preliminary COnsiderations form are valuable in that they are more general statements of how you perceive your instructional situation, and how you interact with the educational environment.

By analyzing your Predictions of Student Response on TABS, you will learn how well you can "read: your students, and to what extent the accuracy (or inaccuracy) of your predictions agrees with the students. If the TABS results surprised you at any point, the predictions results may provide a clue as to the reason your expectations were not met.

Module Two: Data Analysis and Review
Section III: Data Review

ACTIVITY ONE: SELF-ASSESSMENT II

OBJECTIVE

This activity will assist you in determining whether you have now changed your assessment of your performance of some or all of the skills which have formed the focus of this program.

MATERIALS REQUIRED

For this activity, you will need:

1. The TABS questionnaire (Appendix B)
2. A blank Data Report Transparency (found in the rear pocket of this manual)
3. The other completed Data Report Transparencies and forms, if you wish to refer to them.
4. The Data Analysis Log (found in the rear pocket of the manual)
5. The Teaching Performance Profile, in the rear pocket.

DIRECTIONS

1. Review the Data Analysis Log, Data Report Transparencies, Student Response graph, and Analysis of Predictions note sheet.
2. When you have a clear notion of the statements of all the data sources, complete the TABS questionnaire using a blank Data Report Transparency. Complete the TABS using a different color pen than previously used.
3. When you have completed the transparency, place it over the first Self-Assessment Data Report Transparency which you completed in Module One.
4. Note on the Data Analysis Log the differences between the two assessments.

Module Two: Data Analysis and Review
Section III: Data Review

ACTIVITY TWO: OBSERVER II (OPTIONAL)

OBJECTIVE

This activity is intended to provide you with an analysis of your data performed by the observer you identified in Module One. You will then have two analyses that are based on knowledge of all data results, which may be used to help determine your teaching strengths and areas needing improvement.

MATERIALS REQUIRED

For this activity, you will need:

1. The TABS questionnaire (Appendix B)
2. A blank Data Report Transparency
3. The Data Report Form and transparencies for the observer to examine
4. A colored pen
5. The Data Analysis Log, for the observer to examine.

DIRECTIONS

1. Ask your observer to participate in this activity. If s/he agrees, proceed to step two. If not, go on to the next activity in this section.
2. Provide the observer with the TABS Student Data Report Form, and the completed transparencies. Ask him or her to examine the data and when ready, complete the TABS using the Data Report Transparency. S/he should circle "OBSERVER II" on the transparency.
3. When s/he has finished, place the Observer II transparency over the observer's first transparency. Discuss the differences with the observer, particularly which data sources resulted in the change.
4. After the discussion, note the differences on the Data Analysis Log.

ACTIVITY THREE: TEACHING PERFORMANCE PROFILE

OBJECTIVE

The Teaching Performance Profile is a statement of your teaching strengths and areas needing improvement. It is also a statement of the skills you consider critical to your teaching style and situation. Therefore, there are two objectives for this activity. The first is for you to derive a statement of your major instructional strengths and weaknesses, citing supporting evidence. The second objective is that you determine skills you would most like to improve (critical skills).

MATERIALS REQUIRED

You will need the following to complete this activity:

1. The Teaching Performance Profile, found in the rear pocket of this manual..
2. The completed Data Analysis Log
3. The completed Analysis of Predictions form

DIRECTIONS

1. Take the Teaching Performance Profile from the rear pocket of this manual.
2. Write in the space provided the skills you indicated as critical to your teaching style and situation on the Data Analysis Log and the Analysis of Predictions form.
3. Indicate in the space to the right of each item whether the skill or item is strong or needs improvement. (follow the example on the Profile.)
4. Write in the data sources that support the strength or weakness of the item or skill.
5. Referring to the TABS STUDENT RESPONSES, and your GENERAL IMPRESSIONS, rank the items in terms of decreasing strength and increasing need for improvement by numbering each item. Item One should be the strongest.

SELF-INSTRUCTIONAL TEACHING ANALYSIS PROGRAM

SUMMARY

You have now completed the Self-Instructional Teaching Analysis Program. It is hoped that the experience was useful and provided information that will assist you in planning and executing your courses. The activities and procedures you have followed are not simple. You were required to examine your professional performance in extreme depth, and with a great degree of detachment. These are not simple tasks.

As you consider the results of your Teaching Performance Profile, think about the skills you consider critical and in need of improvement. Do you wish to begin to design and implement improvement activities? Perhaps you would like to build on your strengths, and work toward that end. You may also be entirely satisfied with your ratings and performance, and desire no follow-up activities.

Whether or not you choose to pursue follow-up activities, you have completed this program. Please complete the form on the last page of the manual and return it to your Teaching Consultant to inform him or her that you have completed the program. If you do wish to pursue follow-up activities, indicate the nature of the activities or services you desire on the form. Whatever your choice, congratulations on performing a very difficult task.

NAME_____

CAMPUS ADDRESS_____PHONE_____

Check those that apply:

_____Yes, I would like to pursue the following activities;

____Go over my Data Analysis and Review with a Teaching Consultant

____Work with a Teaching Consultant to design and implement improvement activities

____Utilize Self-Instructional Skill Packages for improvement

_____No, I do not wish to pursue any follow-up activities. I have completed the Self-Instructional Teaching Analysis Program

_____I would like to talk with a Teaching Consultant before deciding on follow-up activities.

_____Please send an extra set of forms for my future use (transparencies may be re-used)

PLEASE SEND THIS FORM TO:

Jon M. Anastasio
Northeast/Sylvan Educational Programming
106 Johnson House
CAMPUS

APPENDICES

CLINIC TO IMPROVE UNIVERSITY TEACHING

Teaching Skills and Behaviors: Definitions and TABS Items

The first thirty-eight items on the TABS questionnaire were generated by members of the Clinic staff to provide information on twenty teaching skills extracted from a review of (1) published literature in the field of teaching; (2) inductive studies of effective teaching; and (3) research in the area of higher education. These twenty skills are not meant to be either exhaustive or comprehensive. Instead, they should be considered as take off points for the discussion of both individual teaching performance and the broader issues of teaching and learning.

1. Establishing a Learning Set: the instructor's ability to clarify, communicate and arouse interest in learning objectives. (TABS items 1, 2 and 3.)
2. Evaluation: the instructor's skill in specifying criteria for the assessment of learning, in designing, testing and grading procedures which are consistent with course objectives, and in providing adequate feedback to students about their progress in achieving course ojbectives. (TABS items 4, 19, 20 and 21)
3. Management: the instructor's skill in performing those organizational and administrative tasks which allow instruction to proceed smoothly. (TABS item 27)
4. Elaboration: the instructor's skill in clarifying or developing an idea or topic
5. Logical Organization: the instructor's skill in arranging and presenting course content and learning activities so that students understand the relationships between the various objectives, topics, issues, activities, etc. included in the course. (TABS items 5, 6 and 7)
6. Responding to Questions: The instructor's ability tc answer questions concisely and clearly. (TABS item 13)
7. Closure: the instructor's ability to provide for the integration of major points at the conclusion of class sessions or units of work in order to assist students in the synthesis of new material. (TABS items 17 and 18)
8. Pacing: the instructor's skill in adjusting the rate at which material is covered in order to maximize student comprehension. (TABS item 8)
9. Asking Questions: the instructor's ability to use different types of questions for a variety of instructional purposes, for example, to check for comprehension, to increase student participation, to assist students in developing critical thinking skills, etc. (TABS item 11 and 12)
10. Expression: the instructor's skills in using verbal (voice tone, inflection, pitch, emphasis) and nonverbal (facial expressions, gestures, body movements) behaviors to increase the power and meaning of his/her communication. (TABS item 10)

11. Student Participation: the instructor's skill in facilitating student involvement in class discussions both with the instructor and among themselves. (TABS items 14, 15 and 16)
12. Interpersonal Relations: the instructor's ability to relate to students in ways which promote mutual respect. (TABS item 31)
13. Flexibility: the instructor's ability to recognize and deal with the differing interests and abilities among students both in and out of class. (TABS items 28 and 30)
14. Enthusiasm: the instructor's abilities to conduct and direct learning activities in such a way as to stimulate interest in course content and activities. (TABS item 33)
15. Variety: the instructor's skill at selecting and using an appropriate variety of teaching methods and materials. (TABS items 24 and 25)
16. Creativity: the instructor's ability to combine methods and materials in new and unusual ways. (TABS item 26)
17. Level of Challenge: the instructor's skills in selecting and using course objectives, content and activities which challenge students' abilities without being too difficult. (TABS items 22, 23 and 29)
18. Learning Environment: the instructor's ability to create and maintain an atmosphere conducive to student involvement and achievement. (TABS item 32)
19. Perspective: The instructor's ability to establish a frame of reference reference for course materials and to encourage students in methods of intellectual inquiry. (TABS items 34, 35 and 36)
20. Value Context: the instructor's ability to explore value issues inherent in his/her selection, application, and/or interpretation of subject matter and to assist students in the exploration of their own values and the implications of those values for their personal and professional conduct. (TABS items 37 and 38)

Teaching Analysis By Students

[TABS]

The Clinic to Improve University Teaching is working with instructors to improve the quality of teaching which they offer to their students. The Clinic is designed to help instructors identify and effectively use their particular teaching strengths, to isolate their specific teaching problems, and to develop improvement strategies directed at these problems.

In order to identify these strengths and problems, we are collecting information about teaching in this course by discussing course objectives and teaching patterns with your instructor, by observing and video-taping some classes, and by asking for student opinions about performance on some specific teaching skills and behaviors. The information will be used to obtain a clearer understanding of specific teaching strengths and weaknesses so that your instructor can work toward improvement. Thus, your responses will be of most value to your instructor if they are thoughtful and honest. Your cooperation will be very much appreciated.

Clinic to Improve University Teaching
School of Education
University of Massachusetts at Amherst

In this questionnaire there are some statements concerning a variety of specific teaching skills and behaviors. Please read each statement carefully and then indicate the extent to which you feel your instructor needs improvement. Respond to each statement by selecting one of the following:

1. No improvement is needed
   (very good or excellent performance)
2. Little improvement is needed
   (generally good performance)
3. Improvement is needed
   (generally mediocre performance)
4. Considerable improvement is needed
   (generally poor performance)
5. Not a necessary skill or behavior for this course

Please make your decisions about the degree of improvement needed on the basis of what you think would be best for this particular course and your learning style. Try to consider each statement separately, rather than let your overall feelings about the instructor determine all the responses.

1. The instructor's explanation of *course* objectives
2. The instructor's explanation of the objectives for each class session and learning activity
3. The instructor's ability to arouse my interest when introducing an instructional activity
4. The instructor's explanation of the work expected from each student
5. The instructor's ability to maintain a clear relationship between the course content and the course objectives
6. The instructor's skill in clarifying the relationships among the various topics treated in the course
7. The instructor's skill in making clear the distinction between major and minor topics
8. The instructor's skill in adjusting the rate at which new ideas are covered so that the material can be followed and understood
9. The instructor's ability to clarify material which needs elaboration
10. The instructor's speaking skills
11. The instructor's ability to ask easily understood questions
12. The instructor's ability to ask thought-provoking questions
13. The instructor's ability to answer questions clearly and concisely
14. The instructor's overall effectiveness as a discussion leader
15. The instructor's ability to get students to participate in class discussions
16. The instructor's skill in facilitating discussions *among students* as opposed to discussions only between the instructor and students
17. The instructor's ability to wrap things up before moving on to a new topic
18. The instructor's ability to tie things together at the end of a class
19. The instructor's explanation of precisely how my performance is to be evaluated
20. The instructor's ability to design evaluation procedures which are consistent with course objectives
21. The instructor's performance in periodically informing me of my progress

22. The instructor's selection of materials and activities which are thought-provoking
23. The instructor's ability to select materials and activities which are not too difficult
24. The instructor's provision of *variety* in materials and activities
25. The instructor's ability to use a variety of teaching techniques
26. The instructor's demonstration of creativity in teaching methods
27. The instructor's management of day-to-day administrative details
28. The instructor's flexibility in offering options for individual students
29. The instructor's ability to take appropriate action when students appear to be bored
30. The instructor's availability for personal consultation
31. The instructor's ability to relate to people in ways which promote mutual respect
32. The instructor's maintenance of an atmosphere which actively encourages learning
33. The instructor's ability to inspire excitement or interest in the content of the course
34. The instructor's ability to relate the subject matter to other academic disciplines and real world situations
35. The instructor's willingness to explore a variety of points of view
36. The instructor's ability to get students to challenge points of view raised in the course
37. The instructor's performance in helping me to explore the relationship between my personal values and the course content
38. The instructor's performance in making me aware of value issues within the subject matter

Section II—Other information

Please mark the appropriate response for each of the following items beside the correct statement number on the answer sheet.

39. Class:
    (1) freshman
    (2) sophomore
    (3) junior
    (4) senior
    (5) graduate student

40. Sex:
    (1) male
    (2) female

41. Grade point average:
    (1) less than 1.50 (lowest)
    (2) 1.50-2.49
    (3) 2.50-2.99
    (4) 3.00-3.49
    (5) 3.50-4.00 (highest)

42. In terms of the directions my life is taking, this course is:
    (1) relevant
    (2) somewhat relevant
    (3) irrelevant
    (4) I am unsure

3. In this course I am learning:
   (1) a great deal
   (2) a fair amount
   (3) very little
   (4) I am unsure

4. As a result of this course, my attitude toward the instructor is:
   (1) becoming more positive
   (2) becoming more negative
   (3) unchanged

5. As a consequence of participating in this course, my attitude toward the subject matter is:
   (1) becoming more positive
   (2) becoming more negative
   (3) unchanged

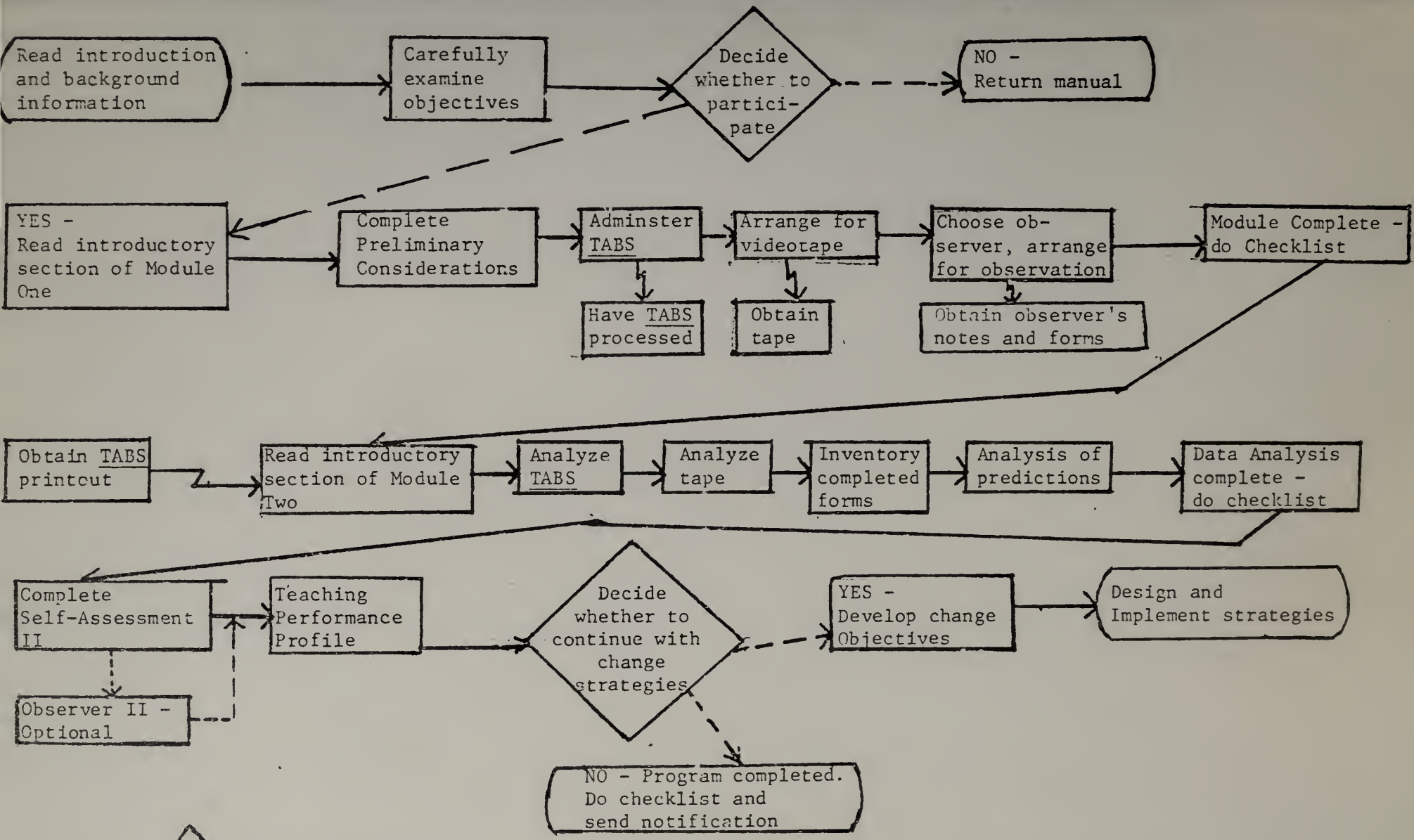
6. I would prefer that this course:
   (1) become more structured or organized
   (2) become less structured or organized
   (3) maintain about the present level of structure

7. Which of the following descriptions of student learning styles most nearly approximates your own? (Choose only one.)
   (1) I like to think for myself, work alone, and focus on learning personally relevant content.
   (2) I prefer highly structured courses and will focus on learning what is required.
   (3) I try to get the "most out of classes," and like sharing my ideas with others and getting involved in class activities.
   (4) I am competitive, concerned about getting good grades, and try to learn material so that I can perform better than others.
   (5) I am generally turned off as a student, uninterested in class activities, and don't care to work with teachers or other students.

8. About how much time and effort have you put into this course compared to other courses of equal credit?
   (1) much more
   (2) somewhat more
   (3) about the same amount
   (4) somewhat less
   (5) much less

9. Generally, how valuable have you found the assigned readings in terms of their contribution to your learning in this course?
   (1) very valuable
   (2) fairly valuable
   (3) not very valuable
   (4) there have been no assigned readings

10. Overall, I would rate this course as:
    (1) excellent
    (2) good
    (3) mediocre
    (4) poor


Read introduction and background information
Carefully examine objectives
Decide whether to participate
NO - Return manual
YES - Read introductory section of Module One
Complete Preliminary Considerations
Adminster TABS
Arrange for videotape
Choose observer, arrange for observation
Module Complete - do Checklist
Have TABS processed
Obtain tape
Obtain observer's notes and forms
Obtain TABS printout
Read introductory section of Module Two
Analyze TABS
Analyze tape
Inventory completed forms
Analysis of predictions
Data Analysis complete - do checklist
Complete Self-Assessment II
Teaching Performance Profile
Decide whether to continue with change strategies
YES - Develop change Objectives
Design and Implement strategies
Observer II - Optional
NO - Program completed. Do checklist and send notification
= Decision Point
= Activity
= Communication with Teaching Consultant or other person
= Terminal Activity
= Optional Activity

APPENDIX C

APPENDIX D

TIME REQUIRED

MODULE ONE: DATA COLLECTION

Activity One: Preliminary Considerations - - - - -45 minutes - 1 hour

Activity Two: Self-Assessment - - - - - - - - - - - 20-30 minutes

Activity Three: Student TABS - - - - - - - - - - - 20 minutes in class
20 minutes preparation

Activity Four: Videotape - - - - - - - - - - - - - -40 minutes

Activity Five: Observation - - - - - - - - - - - - -1 hour 20 minutes

MODULE TWO: DATA ANALYSIS AND REVIEW

SECTION I: PREPARING FOR DATA ANALYSIS

1. TABS Student Data Analysis - - - - - - - - - -1¼ hours
2. Videotape Analysis - - - - - - - - - - - - - - -1½ - 2½ hours, depending on optional activity
3. Comparison of Data - - - - - - - - - - - - - - -2 hours
4. Analysis of Predictions - - - - - - - - - - -45 minutes - 1 hour
5. Self-Assessment II - - - - - - - - - - - - - -45 minutes

* Observer II (Optional)- - - - - - - - - - - -45 minutes - 1 hour

7. Teaching Performance Profile - - - - - - - - 1 hour

Times are approximate, and may vary according to individual circumstances.

Supplementary Materials for

"Module One: Data Collection"

Self-Instructional Teaching Analysis Program

PRELIMINARY CONSIDERATIONS RESPONSE FORM

1. Write the title of the course you have designated for the activities in this manual:

_____Date_____

2. What are the stated goals of the course?

3. Are there any goals you have difficulty accepting (Departmental, institutional goals)?

4. What are the specific abilities and/or knowledge the students should be able to exhibit upon completion of the course (Objectives)?

5. How do you measure student achievement (Tests, papers, etc.)?

6. What major instructional formats do you use (Lecture, discussion, etc.)?

7. What other formats have or do you use occasionally?

8. How well are the present formats working? (Are students acheiving the objectives you specified in question 3?)

9. What do you consider your three most significant teaching strengths?

10. What are the three most significant aspects of your teaching you feel could be improved?

11. List three skills or activities you think it is possible to change at this point.

12. List three skills or activities you feel cannot be changed at this point.

13. How would you describe your teaching style?

14. What is your opinion of the notion that different people may learn most effectively in different ways?

Instructor's Name _____ DATE _____

Number of students completing TABS (please count) _____

As you read each of the first 38 TABS items, carefully estimate the number of students who will respond in each of the categories. Then WRITE IN THE NUMBER of predicted responses in the appropriate column for each item. Note that the first column combines responses 1 and 2. Responses 3 and 4 are combined in the second column and the third column is for response category 5.

	(1) No improvement needed, or (2) Little Improvement needed	(3) Improvement needed, or (4) considerable improvement needed	(5) Not a necessary skill or behavior
	(1 or 2)	(3 or 4)	(5)
1.			
2.			
3.			
4.			
5.			
6.			
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37.			
38.			

PRE-VIDEOTAPE INFORMATION FORM

Course_____Date_____

1. Generally, what do you hope students will get out of this particular class?

2. How will the class be conducted so that students will acheive those goals?

3. How will you decide whether you have been successful?

4. What have students been asked to do to prepare for this particular class?

5. What do you expect the students to be doing during the class?

6. What was done in earlier classes to lead up to this one?

PRE-OBSERVATION INFORMATION FORM

Course_____ Date_____

1. Generally, what do you hope students will get out of this particular class?

2. How will class be conducted so that students will acheive those goals?

3. How will you decide whether you have been successful?

4. What have students been asked to do to prepare for this class?

5. What do you expect students to be doing during the class?

6. What was done in earlier classes to lead up to this one?

Self-Instructional Teaching Analysis Program

DIRECTIONS FOR USING THE OBSERVATION FORM

This form was designed to include some of the more directly observable teaching skills and behaviors of those described in Appendix A of this manual. A number of activities are listed on the left side of the observation form. To the right of each item is a blank space in which should be written your impressions of the instructor's performance of these activities. Please refer to the Suggestions for Classroom Observation, below. As often as possible, you should try to describe the actual behavior of the instructor or students. For example, writing "The instructor asked four thought-provoking questions in the first half-hour" is preferable to "The instructor makes the students think about the topic". However, both statements could be included, as the first statement supports the more general second statement.

The observation form is divided into three sections. The first section contains items that relate to the beginning and end of class. Again, try to describe the behavior as well as the presence or absence of these activities.

The second section contains items related to the general class activities. Please follow the guidelines described above for these items as well.

The third section asks two questions about the instructor's and students' general behavior. It is very important here to state specific actions that support your general perceptions.

SUGGESTIONS FOR CLASSROOM OBSERVATION *

There are number of techniques used to observe teaching in the classroom. The approach used for this program involves writing your general impressions together with specific examples of student or teacher behavior and statements to support your impressions. The following suggestions will assist you in this task.

1. Be specific - statements like "The class was interesting" or "The first ten minutes were boring" give the instructor no idea why they are true.

2. Remember that the instructor will receive your completed observation form. Try to maintain a style that is easily understood.

3. If you wish to record anything not addressed by the form, use the "Other Skills" section or write on the back of the form.

4. Record verbatim as much of what is said and done as possible. Include notes of the time every 5 - 10 minutes to provide a context for your comments to the instructor.

5. Choose a position in the class that will not be distracting to the students, and that will provide you with a different viewpoint from that of the instructor.

* Adapted from materials by Mary Deane Sorcinelli, Indiana University NW

SELF-INSTRUCTIONAL TEACHING ANALYSIS PROGRAM

OBSERVATION FORM

ACTIVITY	PRESENCE/ABSENCE AND DESCRIPTION
Statement of goals and objectives	
Ability to arouse interest in subject matter	
Effectively introduces the day's materials	
Ends class with a summary activity	
Asking Questions	
Responding to questions	
Level of Questions	
Organization of presentation or activity	
Provides summary activity for each topic	
Makes clear the distinction between major and minor topics	
Promotes Discussion	

idents appear interested?
ithetic? What are they
ng?

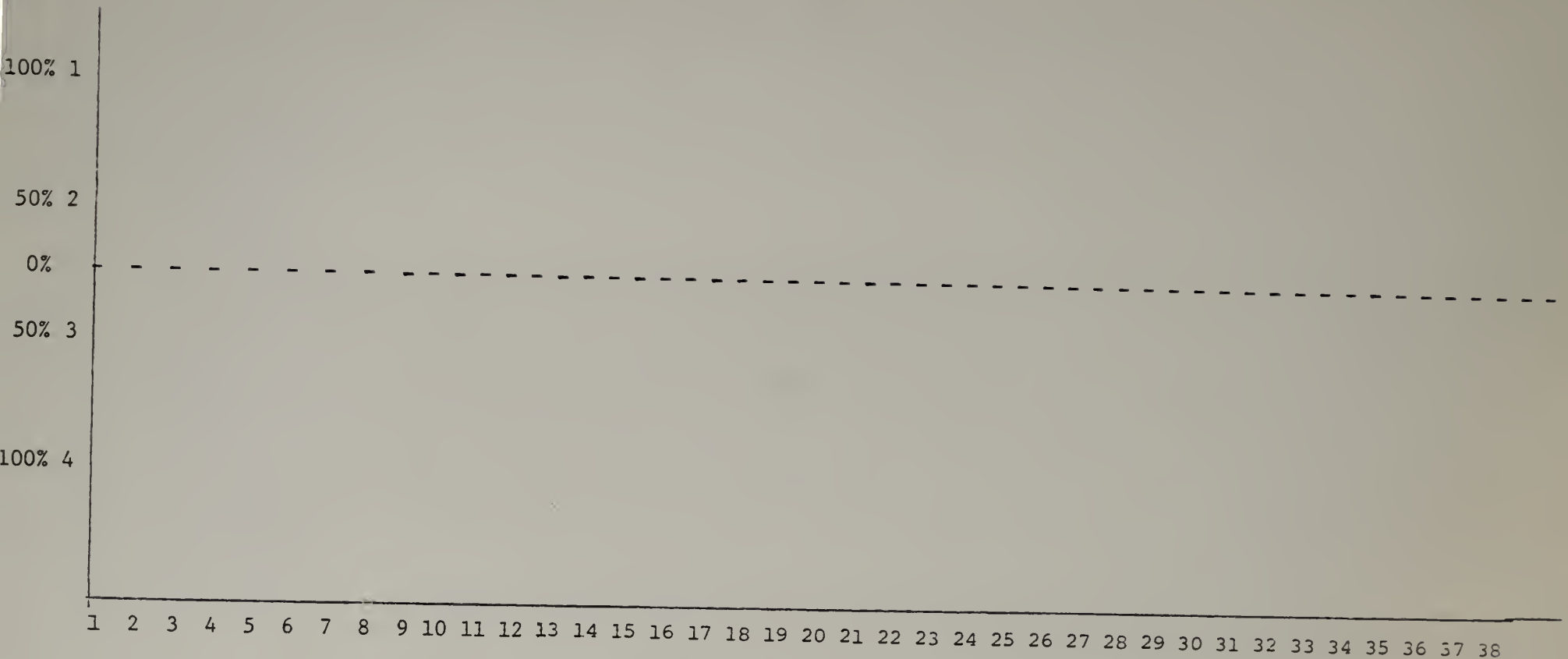
structor appears
erested?

OTHER SKILLS

Supplementary Materials for

"Module Two: Data Analysis and Review"

TABS STUDENT DATA REPORT FORM



5

Class _____ Date _____

DATA ANALYSIS LOG

On these pages, space is provided for you to record the differences in the results of the various data sources as you proceed through the activities in Section II: Data Analysis. Please write in the TABS ITEM NUMBER AND THE SKILL TO WHICH THE ITEM PERTAINS in the space provided. (In the space for "General Comments and New Findings", put the item number and skill only when appropriate. If your general comments are not item- or skill-specific you need not try to relate them to any one item.)

I. COMPARISON OF STUDENT RESPONSES AND SELF-ASSESSMENT

II. COMPARISON OF SELF-ASSESSMENT AND OBSERVER'S COMMENTS

III. COMPARISON OF SELF-ASSESSMENT AND VIDEOTAPE RESULTS

IV. COMPARISON OF STUDENT RESPONSES AND OBSERVER'S COMMENTS

V. COMPARISON OF STUDENT RESPONSES AND VIDEOTAPE RESULTS

VI. COMPARISON OF OBSERVER COMMENTS AND VIDEOTAPE RESULTS

VIII. COMPARISON OF ALL DATA SOURCES - GENERAL COMMENTS AND NEW FINDINGS

DATA REVIEW

I. SELF-ASSESSMENT I AND II COMPARISON

II. OBSERVER I AND II COMPARISON

ANALYSIS OF PREDICTIONS

I. STUDENT INDICATED STRENGTHS

II. STUDENT INDICATED AREAS NEEDING IMPROVEMENT

SELF-INSTRUCTIONAL TEACHING ANALYSIS PROGRAM

TEACHING PERFORMANCE PROFILE

Write in the left column below the name of the skill or item you have identified as critical to your teaching style and instructional environment. Indicate in the spaces to the right of the item or skill whether it is strong or weak, and teh supporting evidence from the data.

EXAMPLE:

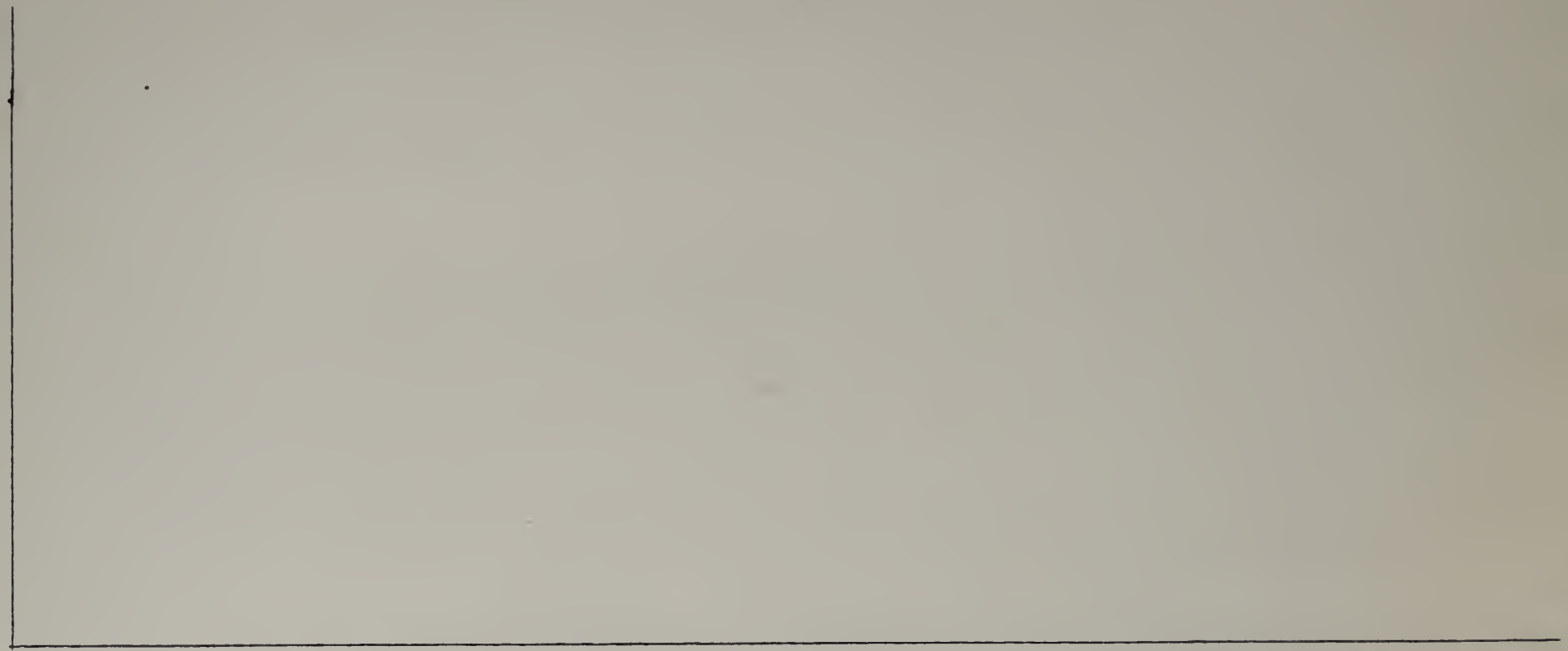
Pacing (item 8)	STRONG - 80% of students in 1&2; Video - asked questions to check for comprehension; Observation - same as video.
* * * * * * * * *	* * * * * * * * *

TABS STUDENT DATA REPORT FORM

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26

DATA REPORT TRANSPARENCY

CIRCLE ONE: Self-Assessment Observer Video Self-Assessment II Observer II



CLASS_____ DATE_____

SELF-INSTRUCTIONAL TEACHING ANALYSIS PROGRAM

Appendix B

Letter Sent to University of Massachusetts Faculty

During Random Sampling Procedures

The Commonwealth of Massachusetts
University of Massachusetts
Amherst 01002

TO IMPROVE UNIVERSITY TEACHING
328 HILLS HOUSE NORTH

198

October 25, 1977

Dear

I am a doctoral student in the School of Education. For the past three years I have been working with the Clinic to Improve University Teaching, using the teaching improvement process developed here to assist faculty at the University of Massachusetts in the acquisition and development of teaching skills.

During the past nine months, I have been working on a self-instructional application of the Clinic Process which will enable faculty to work independently to assess their own teaching strengths and areas needing improvement. I am preparing now to study the results of a test of this approach as my dissertation project. I would greatly appreciate your participation in this study.

The self-instructional approach is known as the Self-Instructional Teaching Analysis Program. It is a manual of approximately fifty pages, which contains information, procedures and materials to guide you in the collection and analysis of data about your teaching performance from four major sources - your students, yourself, a video(or audio)taped sample of your teaching, and the perceptions of an observer designated by you to attend class for that purpose. When all data have been collected, analysis and interperetation of the results is undertaken. The final product is a statement of your major instructional strengths and areas needing improvement, which will serve as a strong foundation for any improvement activities you might choose to undertake. These activities will require approximately eight to twelve hours of your time from the beginning of the program to the end. The program should require one to two months to complete. It is conceiveable that, for one or two hours per week, you could accomplish an in-depth analysis of your teaching.

In addition to determining your teaching analysis, the program will acquaint you with data collection and analysis procedures you may use to continue to monitor your teaching performance without the intervention of improvement staff. It will also enable you to choose the amount of time you devote to such activities, and determine the length of time you devote to the program.

During the next week I will call you to determine whether you would like to participate in this project. At that time I will answer any questions you may have, and schedule a meeting during which I will provide you with a copy of the program, and explain in more detail its purposes and contents.

After that meeting, you will begin to follow the procedures for data collection. At a few points in the program, you will contact me to obtain materials and to have the student data computer scored. In addition to working through the program, I will need you to answer some questions at our meetings about the manual itself. This information will be used to revise the program when all the faculty participating in the study have completed the program.

At the end of the study I will provide you with a copy of the revised program which you may keep. You will retain all collected data, and any information I gain from you regarding your teaching performance will be kept strictly confidential. Of course, you will not be identified by name in the written report of this project.

I thank you for the time you have taken to read this letter. I hope that you will consider participating in this project. If you choose not to participate, please let me know if I may be of any assistance, when I call this week.

Thank you for your time and consideration.

Sincerely,

Jon M. Anastasio
Ed.D. Candidate

Appendix C

--SITAP User Feedback Form

--Final Interview Schedule

SELF-INSTRUCTIONAL TEACHING ANALYSIS PROGRAM

User Feedback Form

A. Please indicate below your feelings regarding the usefulness of the activities contained in the Self-Instructional Teaching Analysis Program in terms of their facilitation of your self-analysis of teaching performance. A rating scale is provided below.

1 Essential	4 Less than useful
2 Very Useful	5 Not very useful
3 Useful	6 Should be deleted

___ 1. Preliminary Considerations

___ 2. TABS Self-Assessment

___ 3. TABS Student Data Administration

___ 4. Videotape

___ 5. Observation

___ 6. TABS Analysis

___ 7. Videotape Analysis

___ 8. Comparisons of Data

___ 9. Analysis of Predictions

___ 10. Observer II (if used)

___ 11. Self-Assessment II (if used)

___ 12. Teaching Performance Profile

B. What do you consider to be the major strengths of the SITAP materials?

C. What do you consider to be the major weaknesses of the materials?

D. What were the major difficulties you encountered in working through the manual?

E. What were the most satisfactory experiences in working through the manual?

F. Do you feel that the self-instructional approach is a useful way to accomplish an analysis of teaching performance?

G. Do you feel such an activity should be offered to other faculty at this institution?

H. Would you now like to design and implement improvement activities based on the results of your teaching performance profile?

I. General comments?

Self-Instructional Teaching Analysis Program

Interview Schedule

1. Now that you have completed the Self-Instructional Teaching Analysis Program, what are your general feelings about the experience?

2. Do you feel you achieved a satisfactory statement of your teaching strengths and weaknesses?

3. Did you perform all the tasks required in the manual? Which did you omit? Why?

4. Which activities did you feel were the most useful?

5. Which activities did you find least useful?

6. What do you consider the major outcomes of the program in terms of the benefits you derived from its use?

7. How much time (in hours) would you say the program required?

8. Do you feel that benefits to you justified that expenditure of time?

9. Do you feel it took too much time?

10. Are there any suggestions you have for revising the manual?

Appendix D

Logs of Researcher Interaction with Participants

LOG OF CONTACT WITH PARTICIPANTS

DATE	NATURE OF CONTACT	LENGTH OF CONTACT
	Participant "A"	
Feb. 13	Introduce materials and project provided TABS forms	45 minutes
March 20	Obtained completed TABS student forms, Self-Assessment, and Predictions	10 minutes
April 4	Returned computer printout	10 minutes
	*Time spent in computer scoring-- Keypunching, etc.	20 minutes
April 10	Videotaped class in absence of departmental resources	120 minutes
June 2	Final interview, closure	45 minutes
	Phone call re Analysis	5 minutes
	TOTAL	4.16 hours
	Participant "B"	
Feb. 14	Introduce materials and project, provided TABS forms	45 minutes
Feb. 14	Telephone call requesting pen for transparencies	5 minutes
Feb. 23	Telephone call - completed TABS	5 minutes
Feb. 24	Obtained TABS, minus Predictions	15 minutes
March 6	Obtained Predictions	10 minutes
March 15	Returned printout	5 minutes
	*Time spent in computer scoring-- Keypunching, etc.	20 minutes

LOG OF INTERACTION WITH PARTICIPANTS

DATE	NATURE OF CONTACT	LENGTH OF CONTACT
	Participant "B" (cont'd.)	
April 10	Telephone call--wants experimenter to do videotape--will call when decision is definite	5 minutes
June 6	Final interview, closure	40 minutes
	TOTAL	hours
	Participant "C"	
March 7	Introduce materials and project, provided TABS forms	30 minutes
April 11	Telephone call from "C"--has completed TABS	2 minutes
April 20	Obtained completed TABS forms	30 minutes (travel)
April 26	Returned TABS printout	30 minutes (travel)
	*Time spent in computer scoring TABS--Keypunching, etc.	20 minutes
June 4	Final interview, closure	60 minutes
	TOTAL	2.78 hours
	Participant "D"	
March 7	Introduction of materials and project, provided TABS forms	30 minutes
April 11	Called to determine progress	5 minutes (travel)
April 20	Obtained completed TABS forms	30 minutes (travel)
April 26	Returned TABS printout	30 minutes (travel)
June 7	Final interview, closure	60 minutes (travel)
	TOTAL	2.41 hours

LOG OF INTERACTION WITH PARTICIPANTS

DATE	NATURE OF CONTACT	LENGTH OF CONTACT
	Participant "E"	
March 7	Introduction of materials and project, provided TABS forms	30 minutes
April 11	Called to determine progress	5 minutes
April 20	Obtained completed TABS forms	30 minutes (travel)
April 26	Returned TABS printout	30 minutes (travel)
June 9	Final interview, closure	30 minutes
	TOTAL	1.91 hours
	Participant "F"	
April 23	Introduction of materials, project-provided TABS forms	20 minutes
June 6	Confirmed completion of program by telephone	10 minutes
	*TABS were hand scored.	
June 15	Questionnaire received. Interview not possible as sample member lives in Florida--telephone discussion of experiences	20 minutes
	TOTAL	50 minutes
	Participant "G"	
April 23	Introduction of materials and project--provided TABS forms	20 minutes
June 6	Confirmed completion of program	10 minutes
	*TABS were hand scored.	
June 14	Final Interview, closure	25 minutes
	TOTAL	55 minutes